



# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

## MEETING MATERIALS

FEBRUARY 15, 2007

CALTRANS

BAY AREA TOLL AUTHORITY

CALIFORNIA TRANSPORTATION COMMISSION





## *Letter of Transmittal*

**TO:** Toll Bridge Program Oversight Committee  
(TBPOC)

**DATE:** February 14, 2007

**FR:** Program Management Team (PMT)

**RE:** TBPOC Meeting Materials Packet – February 15, 2007

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Attached is the TBPOC Meeting Materials Packet for the February 15<sup>th</sup> meeting. The packet includes memoranda and reports that will be presented at the meeting. A Table of Contents is provided following the Agenda to help locate specific topics. Items that are to be included after the mail-out will be printed on blue paper.

**TBPOC MONTHLY MEETING  
February 15, 1:00 PM - 2:50 PM  
Room 444, California State Capitol,  
1301 10<sup>th</sup> St., Sacramento**

<b>Topic</b>	<b>Presenter</b>	<b>Time</b>	<b>Desired Outcome</b>
<b>1. CHAIR'S REPORT</b>	W. Kempton, CT	5 min	Information
<b>2. CONSENT CALENDAR</b> a. December 21, 2006 Meeting Minutes* b. February 06, 2007 Conference Call Minutes** c. 2007 TBPOC Meeting Calendar* d. BATA/BAMC Contract Extension*	A. Fremier, BATA	1 min 1 min 2 min 1 min	Approval Approval Approval Approval
<b>3. PROGRESS REPORT</b> a. February 2007 Monthly Progress Report***	A. Fremier, BATA	2 min	Information
<b>4. PROGRAM ISSUES</b> a. Final Strategy for YBI* b. TBSRP Strategic Plan* c. 2007 Legislative Update Preparations* d. Dumbarton/Antioch Bridge Update*	T. Anziano, CT PMT B. Ney, CT A. Fremier, BATA	15 min 30 min 10 min 10 min	Approval Approval Information Information
<b>5. SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES</b> a. West Approach 1) Update of CCO 149 – Realignment of ST6D, Stage 5 Detour* b. Yerba Buena Island (See 'Program Issues') c. East Span SAS Superstructure 1) CCO 21 – Tower Splice Changes* d. Oakland Touchdown 1) Addendum 1*	T. Anziano, CT	See below  5 min  5 min 5 min	See below  Information/ Approval  Approval Approval
<b>6. NEW BENICIA-MARTINEZ BRIDGE UPDATE</b> a. 680/780 Interchange/North Approach: 1) CCO 135 – TRO Adjustment*	T. Anziano, CT	  5 min	  Approval
<b>7. Other Business</b>	W. Kempton, CT	TBD	Information
<b>Next Meeting: Friday, April 6, 2007, 10:00 AM – 12:00 PM, New Benicia-Martinez Bridge Administration Building, Martinez, CA</b>			

\* Attachments

\*\* Final Documents still in process; to be provided as soon as available.

\*\*\* Stand alone document included in the binder.

## **TBPOC MONTHLY MEETING February 15, 2007**

<b>INDEX TAB</b>	<b>AGENDA ITEM</b>	<b>DESCRIPTION</b>
1	1	<b>CHAIR'S REPORT</b> (No attachments)
2	2	<b>CONSENT CALENDAR</b> a. December 21, 2006 Meeting Minutes* b. February 06, 2007 Conference Call Minutes* c. 2007 TBPOC Meeting Calendar* d. BATA/BAMC Contract Extension*
3	3	<b>MONTHLY PROGRESS REPORT</b> a. February 2007 Monthly Progress Reports ***
4	4	<b>PROGRAM ISSUES</b> a. Final Strategy for YBI* b. TBSRP Strategic Plan* c. 2007 Legislative Update Preparations* d. Dumbarton/Antioch Bridge Update*
5	5	<b>SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES</b> a. West Approach 1) Update CCO 149 – Realignment of ST6D, Stage 5 Detour* b. Yerba Buena Island (See 'Program Issues') c. East Span SAS Superstructure* 1) CCO 21 – Tower Splice Changes* d. Oakland Touchdown 1) Addendum 1*
6	6	<b>NEW BENICIA-MARTINEZ BRIDGE UPDATE*</b> a. 680/780 Interchange/North Approach: 1) CCO 135 – TRO Adjustment*
7	7	<b>OTHER BUSINESS</b> (No attachments)

\* Attachments

\*\* Final Documents still in process; to be provided at the meeting.

\*\*\* Stand alone document included in the binder.



## **Item 1: Chair's Report**



## **Item 2: Consent Calendar**

## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** February 12, 2007

**FR:** Andrew Fremier, BATA Deputy Executive Director

**RE:** Agenda No. - 2a  
Consent Calendar  
Item- December 21, 2006 Meeting Minutes

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**RECOMMENDATION:**

Approval

**COST:**

N/A

**SCHEDULE IMPACTS:**

N/A

**DISCUSSION:**

The Program Management Team has reviewed and requests approval of the TBPOC December 21, 2006 Meeting Minutes.

**Attachment(s):**

1) December 21, 2006 Meeting Minutes



# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

## MEETING MINUTES

December 21 2006, 1:00 PM – 3:00 PM  
Director's Conference Room 1121, Caltrans  
1120 N St., Sacramento, CA

**Attendees:** TBPOC Members: Will Kempton, Steve Heminger, John Barna;  
PMT Members: Tony Anziano, Andy Fremier, Stephen Maller;  
Participants: Jim Bourgart (BTH), Michele DiFrancia, Beatriz Lacson,  
Bart Ney, Judis Santos, Bijan Sartipi, Jon Tapping

Convened: 1:24 PM

Items	Action
<p><b>1. CHAIR'S REPORT</b></p> <ul style="list-style-type: none"><li>• The Chair indicated that the response to PG&amp;E's letters of December 12, 2006 and December 18, 2006 on the Submarine Cable Relocation Contract is being revised to include reference to:<ul style="list-style-type: none"><li>○ the discussion of the project status at the December 20 BATA Commission meeting, and</li><li>○ the Commission's approval at that meeting of an additional contingent allocation of funds in order to award the project to the lowest responsive bidder.</li></ul></li><li>• The letter is expected to go out this afternoon under the Chair's signature with copies to Deputy Secretary of Business, Transportation and Housing Agency Jim Bourgart (present at this meeting) and the members of the TBPOC, MTC, and TIDA.</li><li>• The Chair also noted that the Treasure Island Development</li></ul>	

(continued)

Items	Action
Authority (TIDA) and San Francisco Public Utilities Commission (SFPUC) do not require SF Board of Supervisors action to participate in the Submarine Cable Relocation Contract bid process, and should be able to give a timely response no later than January 9, 2007 when contract award is scheduled.	
<b>2. CONSENT CALENDAR</b> BATA presented the minutes for the: a. November 21, 2006 Meeting b. December 19, 2006 Conference Call	<ul style="list-style-type: none"><li>• The TBPOC <b>APPROVED</b> the minutes for the November 21, 2006 meeting and December 19, 2006 conference call.</li></ul>
<b>3. MONTHLY PROGRESS REPORT</b> a. BATA presented the draft December 2006 Monthly Progress Report for information. <ul style="list-style-type: none"><li>• TBPOC approval through their respective PMT representatives is anticipated after appropriate reviews and final comments are incorporated.</li><li>• Mail-out is scheduled for January 3, 2007.</li><li>• The quarterly report process has started and is on schedule.</li><li>• The Chair reported some changes in the organization structure of pertinent agencies and encouraged staff to be mindful of dates and deadlines to allow new agency personnel ample time to review reports.</li></ul>	<ul style="list-style-type: none"><li>• BATA stated for the record that the TBPOC <b>APPROVED</b> the November 2006 Monthly Progress Report through their respective PMT members on December 4, 2006.</li></ul>
<b>4. PROGRAM ISSUES</b> a. The PMT presented a verbal overview of the Toll Bridge Seismic Retrofit Program (TBSRP) Strategic Plan. <ul style="list-style-type: none"><li>• Focus is on identifying key opportunities to advance schedule.<ul style="list-style-type: none"><li>○ Corridor Schedule Team tasked with isolating the</li></ul></li></ul>	



(continued)

Items	Action
<p>occasions for timetable acceleration.</p> <ul style="list-style-type: none"> <li>○ Give attention to fabrication and prompt turnaround of working drawings and RFI's.</li> <li>○ Solutions must continue to support taking work off the critical path and reduce risks of delay.</li> </ul> <ul style="list-style-type: none"> <li>• The TBPOC reiterated emphasis on schedule acceleration and noted the following:               <ul style="list-style-type: none"> <li>○ The Committee requests to hear ideas, challenges and strategies on schedule acceleration, and be presented with strategic themes followed by technical information.</li> <li>○ Suggested a schedule with a goal to shoot for: need to focus on speeding up the 2013-2014 time frame and finding possible ways to open the bridge to traffic sooner than planned.</li> <li>○ This becomes the organizing principle: does it help or impede?</li> <li>○ Shrink SAS and line up YBITS and other contracts.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• The PMT to provide a formal PowerPoint presentation at the January 25<sup>th</sup> meeting, conveying the elements of the strategic plan.</li> </ul>
<p><b>5. SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES</b></p> <p>The Department provided a brief description of the summary format that will be included in the monthly meeting materials to update the TBPOC of current contracts and projects, in addition to what is found in the Monthly Progress Reports.</p> <p>a. West Approach</p> <ul style="list-style-type: none"> <li>• The Department requested authorization to negotiate CCO 149 – Realignment of ST6D, Stage 5</li> </ul>	<ul style="list-style-type: none"> <li>• The TBPOC <b>APPROVED</b> proceeding with the Department's negotiation of</li> </ul>

**(continued)**

Items	Action
<p>Detour, in an amount not to exceed \$6 million.</p> <ul style="list-style-type: none"><li>○ A 3D-animation presentation was provided to compare the As-planned vs. CCO 149 alignment options as to cost and traffic impacts.</li><li>○ The work will eliminate the need to construct the interim First St. and Essex St. on-ramps as originally planned, as well as the attendant constructability issues and traffic complications.</li></ul> <ul style="list-style-type: none"><li>• The following items were brought up:<ul style="list-style-type: none"><li>○ While constructability issues were recognized a year ago, the cost was only identified a month ago.</li><li>○ There is no impact to the schedule.</li><li>○ CCO 149 would cost more but yield better operational results.</li></ul></li><li>• The budget balance beam was briefly discussed.</li></ul> <p>b. Yerba Buena Island</p> <ul style="list-style-type: none"><li>• The Department reported that ABF wants to work on the W2 beam as soon as possible (March).<ul style="list-style-type: none"><li>○ This would require advance work in W3 for an approximate cost of \$7 million to accommodate W2 work.</li><li>○ The contractor C. C. Myers</li></ul></li></ul>	<p>CCO 149 in an amount not to exceed \$6 million, for the realignment of ST6D, Stage 5 Detour.</p> <ul style="list-style-type: none"><li>• While the \$18 million opportunities from excess Right of Way (R/W) sales would pull back the \$2 million additional cost over budget, the TBPOC suggested that the budget be shown without R/W savings.</li></ul>

(continued)

Items	Action
<p>(CCM) can do the work immediately.</p> <ul style="list-style-type: none"><li>○ The plan is to present a CCO to the Committee for approval in January 2007 in order to proceed with this advance work.</li></ul> <ul style="list-style-type: none"><li>• The TBPOC pointed out its willingness to be flexible and stressed the need for information to be presented to them sooner to allow for a more thoughtful Committee decision.</li><li>• The budget balance beam was briefly discussed. The TBPOC noted that this graphic does not show the big picture, i.e., what are the cost, schedule and risk implications.</li><li>• The Chair reported that he and CTC Executive Director John Barna met with TIDA and the City and County of San Francisco (CCSF) representatives regarding matching funds for the construction of Treasure Island ramps from bond funds using TBSRP resources.<ul style="list-style-type: none"><li>○ The Chair committed to work within the constraints of the project schedule (as long as the work does not impact it).</li></ul></li></ul> <p>c. E2/T1 Foundations</p> <ul style="list-style-type: none"><li>• Foundation work is proceeding very well with no surprises or issues.<ul style="list-style-type: none"><li>○ To be completed in 2008, with an incentive to complete in 2007.</li></ul></li></ul>	<ul style="list-style-type: none"><li>• The TBPOC moved to change agenda item 5b from an information item into an action item, and <b>APPROVED</b> proceeding with the Department's negotiation of a CCO in an amount not to exceed \$7 million, to allow CCM to begin work on W3 immediately to facilitate ABF work on W2; subject to final action in January 2007.</li><li>• The TBPOC requested:<ul style="list-style-type: none"><li>○ an illustration that conveys interdependencies, impact, and the "big picture" positive and/or negative sides; and</li><li>○ that the budget balance beams be adjusted to show program level roll-up of cost, schedule, and risk.</li></ul></li></ul>

(continued)

Items	Action
<p>d. East Span SAS Superstructure</p> <p>1) The Department requested approval to proceed with CCO 14 - Office Space for SAS Staff, in the amount of \$1.8 million.</p> <ul style="list-style-type: none"><li>○ The temporary facilities will be used jointly by staff from the Department, CTC, BATA and Contractor during construction.</li><li>○ This anticipated expense is within the supplemental funds set aside for this and other items.</li><li>○ The Department is handling this through CCO but the Department will manage the work so as not to be a distraction to the Contractor (ABF).</li><li>○ It is envisioned that some construction services will be provided by a small business, i.e., a small business opportunity.</li><li>○ There is a long-term lease of project space at Pier 7 through 2010 with a 2-year extension.</li></ul> <ul style="list-style-type: none"><li>• ABF continues to mobilize staff to the field office.</li><li>• Focus is on critical work in Shanghai where ZPMC is showing dedication to ensure success and stay on schedule.<ul style="list-style-type: none"><li>○ Completion of facility onsite is March '07.</li><li>○ The team-building lead has been identified, as well as housing and medical requirements, among others.</li><li>○ The challenge is getting personnel to China; also need to figure out a way to pay for</li></ul></li></ul>	<ul style="list-style-type: none"><li>• The TBPOC <b>APPROVED</b> CCO 14 in the amount of \$1.8 million for office facilities for SAS staff, as recommended.</li></ul>

(continued)

Items	Action
<p>children's school.</p> <ul style="list-style-type: none"><li>• Due to team effort issues, it was noted that candidates for the China assignment are to come from within the Department, with BATA and CTC being provided an opportunity to also have staff overseas.</li></ul> <p>e. East Span Skyway</p> <ul style="list-style-type: none"><li>• The project is on schedule to complete in December 2007.</li><li>• The final segment shipping and lift occurred early this month which gave positive attention to the project and was a major turning point for E2/T1.</li><li>• Opportunities to recover some of the baseline schedule will be known by December 2007.</li></ul> <p>f. Oakland Touchdown (OTD)</p> <ul style="list-style-type: none"><li>• OTD1 will be advertised on February 5, 2007, with a bid opening date of June 5, 2007<ul style="list-style-type: none"><li>○ The contract will include a work-around specification language.</li></ul></li></ul>	
<p><b>6. NEW BENICIA-MARTINEZ BRIDGE</b></p> <p>a. Benicia Main Span</p> <p>1) The Department requested approval for Supplement 1 to CCO 111 in the amount of \$500,000 for "Transportation for the Engineer."</p> <ul style="list-style-type: none"><li>○ The CCO provides additional funding to compensate the contractor for transportation cost and work during the 212-day contract extension provided for in another contract change order (CCO 133).</li></ul> <ul style="list-style-type: none"><li>• This is a supplement to CCO 111 approved on July 16, 2004.</li></ul>	<ul style="list-style-type: none"><li>• The TBPOC <b>APPROVED with a 2-1 vote</b> (S. Heminger dissented) CCO 111.1 in the amount of \$500,000 for "Transportation for the Engineer", as recommended.</li></ul>



(continued)

Items	Action
<p>2) The Department requested approval for CCO 164 in the amount of \$4.83 million for additional work necessary to implement open road tolling (ORT) at the new toll plaza and to open the bridge to traffic.</p> <ul style="list-style-type: none"><li>○ At the November 21st meeting, the TBPOC authorized the Department to negotiate a CCO for this purpose in an amount not to exceed \$5.8 million (including \$0.5 million in contingency).</li><li>○ An additional amount of \$500,000 is anticipated to complete the work which will be covered by supplemental change orders.</li></ul>	<ul style="list-style-type: none"><li>• The TBPOC <b>APPROVED</b> CCO 164 – Open Road Tolling and Open Bridge to Traffic, in the amount of \$4.83 million, as recommended.</li></ul>
<p><b>7. Other Business</b></p> <ul style="list-style-type: none"><li>• The Chair asked about the meeting with State Legislative leaders discussed last month.<ul style="list-style-type: none"><li>○ The PMT confirmed that this was being scheduled around the issuance of the Fourth Quarter Report ending December 31, 2006.</li><li>○ It is on the calendar to follow the February 22, 2007 TBPOC meeting.</li></ul></li><li>• The Chair adjourned the meeting and wished everyone a Happy Holiday.</li></ul>	<ul style="list-style-type: none"><li>• The TBPOC agreed to hold their January 25th meeting in the New Benicia-Martinez Bridge Administration Building at Martinez.</li></ul>

Adjourned: 2:56 PM

***(continued)***

**MEETING MINUTES**

December 21 2006, 1:00 PM – 3:00 PM  
Directors Conference Room 1121, Caltrans  
1120 N St., Sacramento, CA

**APPROVED BY:**

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**WILL KEMPTON**, Director  
California Department of Transportation

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Date

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**JOHN F. BARNA, Jr.**, Executive Director  
California Transportation Commission

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Date

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**STEVE HEMINGER**, Executive Director  
Bay Area Toll Authority

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Date

## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** February 12, 2007

**FR:** Andrew Fremier, BATA Deputy Executive Director

**RE:** Agenda No. - 2b  
Consent Calendar  
Item- February 06, 2007 Conference Call Minutes

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**RECOMMENDATION:**

Approval

**COST:**

N/A

**SCHEDULE IMPACTS:**

N/A

**DISCUSSION:**

The Program Management Team has reviewed and requests approval of the TBPOC February 06, 2007 Conference Call Minutes.

**Attachment(s):**

1) February 06, 2007 Conference Call Minutes



# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

## MEETING MINUTES

February 6, 2007, 9:00 AM – 9:30 AM  
TBPOC Conference Call

### Attendees

TBPOC Members: Randell Iwasaki (in place for Will Kempton), Steve Heminger, John Barna

PMT Members: Tony Anziano, Andrew Fremier

Participants: Michele DiFrancia, Brian Maroney, Judis Santos, Bijan Sartipi

Convened: 9:06 AM

Items	Desired Outcome
<p><b>1. 2007 Legislative Update Meeting Materials</b></p> <ul style="list-style-type: none"><li>• TBPOC requested the following amendments to be included in the report:<ul style="list-style-type: none"><li>○ Add a section on the Dumbarton/Antioch Bridge</li><li>○ Add a description of the West Approach staging and demolition while traffic remains open.</li></ul></li><li>• S. Heminger requested that the final draft copy be sent to the TBPOC prior to production.</li><li>• TBPOC requested an update on meeting attendance.</li></ul>	<ul style="list-style-type: none"><li>• TBPOC <b>APPROVED</b> the 2007 Legislative Update written report, with the following comments.</li><li>• Final Draft report to be sent to TBPOC electronically on 2/9/07.</li><li>• PMT to follow up with Bart Ney on meeting attendance of the 2007 Legislative Update.</li></ul>
<p><b>2. Fourth Quarter Report Ending December 31, 2006</b></p> <ul style="list-style-type: none"><li>• T. Anziano reported that comments have been received and incorporated on the 4<sup>th</sup> Quarter Report. Recommended forecast revisions were discussed at the PMT on</li></ul>	

**(continued)**

Items	Desired Outcome
<p>2/5/07, and include the following:</p> <ul style="list-style-type: none"><li>○ Stormwater Treatment Measures Contract - \$900,000 increase in capital outlay support</li><li>○ Submarine Cable Contract - Report financials will carry a note indicating that BATA allocation is \$9.6 million but additional non-program funding from San Francisco is covering the difference between program funding and actual allocation.</li></ul> <ul style="list-style-type: none"><li>• J. Barna stated that options for acceleration need to be presented first before the TBPOC discusses/approves YBI and other forecast changes.</li><li>• S. Heminger noted that the TBPOC needs to have a thorough understanding of issues surrounding the potential closure at the end of the year.</li></ul>	<ul style="list-style-type: none"><li>• TBPOC <b>APPROVED</b> the Fourth Quarter Report Ending December 31, 2006 which included the approval of two forecast changes:<ul style="list-style-type: none"><li>○ Stormwater Treatment Measures Contract - \$900,000 increase in capital outlay support</li><li>○ Submarine Cable Contract - Report financials will carry a note indicating that BATA allocation is \$9.6 million but additional non-program funding from San Francisco is covering the difference between program funding and actual allocation.</li></ul></li><li>• TBPOC requested that a series of meetings be scheduled to discuss acceleration options.</li></ul>

Adjourned: 9:25 AM



***(continued)***

**MEETING MINUTES**  
February 6, 2007, 9:00 AM – 9:30 AM  
TBPOC Conference Call

**APPROVED BY:**

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**WILL KEMPTON**, Director  
California Department of Transportation

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Date

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**JOHN F. BARNA, Jr.**, Executive Director  
California Transportation Commission

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Date

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**STEVE HEMINGER**, Executive Director  
Bay Area Toll Authority

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Date

## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** February 12, 2007

**FR:** Andrew Fremier, BATA Deputy Executive Director

**RE:** Agenda No. - 2c  
Consent Calendar  
Item- 2007 TBPOC Meeting Calendar

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**RECOMMENDATION:**

Approval

**COST:**

N/A

**SCHEDULE IMPACTS:**

N/A

**DISCUSSION:**

The PMT requests approval of the attached 2007 TBPOC Meeting Calendar. The calendar was revised to reflect the frequency of TBPOC meetings from monthly to an average of every six weeks. The modified frequency will allow staff sufficient time to prepare presentations and materials for the meetings. Teleconferences are suggested between meetings, as required.

**Attachment(s):**

1) 2007 TBPOC Meeting Calendar as of January 30, 2007

**2007 TBPOC Meeting Calendar**  
(as of February 2, 2007)

JANUARY 2007				
MON	TUE	WED	THU	FRI
HOLIDAY 1	PMT 2	3	4	5
PMT 8	9	BATA OC 10	11	12
HOLIDAY 15	PMT 16	17	18	19
PMT 22	23	MTG 24	25	26
PMT 29	30	CTC 31		

1 - New Years Day Observed  
15 - M L King Jr's Birthday

FEBRUARY 2007				
MON	TUE	WED	THU	FRI
			CTC 1	2
PMT 5	6	7	8	4 Final 9
HOLIDAY 12	4 Leg PMT 13	BATA OC 14	TBPOC Leg Up Sac 15	16
HOLIDAY 19	PMT 20	21	22	23
RM PMT 26	27	MTG CTC 28		

12 - Lincoln's Birthday  
19 - Presidents Day

MARCH 2007				
MON	TUE	WED	THU	FRI
			1	2
PMT 5	6	BATA OC 7	8	9
PMT 12	13	CTC 14	CTC 15	16
PMT 19	20	21	22	23
CST PMT 26	27	MTG 28	29	HOLIDAY 30

30 - Cesar Chavez's Birthday

APRIL 2007				
MON	TUE	WED	THU	FRI
PMT 2	3	4	5	TBPOC Bay 6
PMT 9	10	BATA OC 11	12	13
PMT 16	17	18	19	20
PMT 23	24	MTG 25	CTC 26	27
PMT 30				

MAY 2007				
MON	TUE	WED	THU	FRI
	1	2	3	4
PMT 7	8	BATA OC 9	10	1 Final 11
PMT 14	1 Leg 15	16	17	18
PMT 21	22	MTG 23	TBPOC Sac 24	25
HOLIDAY 28	RM PMT 29	30	31	

28 - Memorial Day

JUNE 2007				
MON	TUE	WED	THU	FRI
				1
PMT 4	5	CTC 6	CTC 7	8
PMT 11	12	BATA OC 13	14	15
PMT 18	19	20	21	22
CST PMT 25	26	MTG 27	TBPOC Bay 28	29

JULY 2007				
MON	TUE	WED	THU	FRI
PMT 2	3	HOLIDAY 4	5	6
PMT 9	10	BATA OC 11	12	13
PMT 16	17	18	19	20
PMT 23	24	MTG CTC 25	CTC 26	27
PMT 30	31			

4 - Independence Day

AUGUST 2007				
MON	TUE	WED	THU	FRI
		1	TBPOC Sac 2	3
PMT 6	7	8	9	2 Final 10
PMT 13	2 Leg 14	15	16	17
PMT 20	21	22	23	24
RM PMT 27	28	29	30	31

SEPTEMBER 2007				
MON	TUE	WED	THU	FRI
HOLIDAY 3	PMT 4	5	6	7
PMT 10	BATA OC 12	12	13	14
PMT 17	18	CTC 19	CTC 20	21
CST PMT 24	25	MTG 26	TBPOC Bay 27	28

3 - Labor Day

OCTOBER 2007				
MON	TUE	WED	THU	FRI
PMT 1	2	3	4	5
HOLIDAY 8	PMT 9	BATA OC 10	11	12
PMT 15	16	17	18	19
PMT 22	23	MTG 24	25	26
PMT 29	30	31		

8 - Columbus Day

NOVEMBER 2007				
MON	TUE	WED	THU	FRI
			1	2
PMT 5	6	CTC 7	CTC 8	3 Final 9
Veteran's Day 12	PMT 13	3 Leg BATA 14	15	16
PMT 19	TBPOC Sac 20	21	HOLIDAY 22	HOLIDAY 23
RM PMT 26	27	MTG 28	29	30

9 - Veteran's Day  
22, 23 - Thanksgiving Day and day after

DECEMBER 2007				
MON	TUE	WED	THU	FRI
PMT 3	4	5	6	7
PMT 10	11	BATA CTC 12	CTC 13	14
PMT 17	18	MTG 19	20	21
	HOLIDAY 24	CST PMT 25	TBPOC Bay 26	27
31				

25 - Christmas Day observed

	Qtrly Rept Schedule
Final	TBPOC Final Comments
Leg	Issue to Legislature & CTC
RM	Risk Management Briefing to PMT
CST	Corridor Schedule Team Briefing to PMT

PMT Meetings are held in the PIO Conference Room, 311 Burma Road, Oakland, 1:00 PM - 2:30 PM  
TBPOC Meetings in Sacramento start @ 1:00 PM  
TBPOC Meetings in the Bay Area start @ 10:00 AM

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** February 12, 2007

**FR:** Andrew Fremier

**RE:** Agenda No. - 2d  
Consent Calendar  
Item- BATA/BAMC Contract Extension

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**RECOMMENDATION:**

Per TBPOC by-laws, the TBPOC will review and approval major toll bridge program consultant contracts. BATA staff seeks TBPOC concurrence to exercise an option to extend the existing BAMC contract by two years to provide program oversight services for BATA, prepare monthly and quarterly reporting, and provide other consultant services for BATA as necessary.

**COST:**

The contract extension would cost \$6.9 million and will be toll funded from the BATA Capital Program Budget.

**SCHEDULE IMPACTS:**

N/A

**DISCUSSION:**

In July 2005, Bay Area Management Consultants (BAMC), a joint venture of URS and Hatchmott MacDonald, was competitively selected to provide program and project monitoring and oversight services to BATA over both the Regional Measure 1 (RM1) and Toll Bridge Seismic Retrofit (SRP) Programs.

The BAMC team has worked hard to complete their primary tasks within time and budget and has been very accommodating and flexible on performing a number of secondary tasks as requested. The major services provided by BAMC to BATA include:

- Preparation of monthly and quarterly TBPOC reporting
- Review of significant contract change orders (CCO's)
- Review of project plans, specifications, and estimates (PS&E)
- Assistance with Caltrans' risk management efforts

- Task orders as requested, i.e. administrative TBPOC staffing, preparation of FasTrak Strategic Plan Toll Plaza Improvements PS&E packages, preparation of addendum packages for the Interstate 880/State Route 92 Interchange Project.

The original value of the BAMC contract was \$6.3 million for two years from July 2005 to July 2007. BATA later supplemented the contract by \$2.0 million to \$8.3 million to develop the design packages for the FasTrak Strategic Plan Toll Plaza Improvements. BATA staff is seeking TBPOC concurrence to exercise a BATA option to extend the BAMC contract for another two years through July 2009 at a cost of \$6.9 million, which includes a \$600,000 increase for additional task order services.

The contract will be toll funded from the BATA Capital Program budget.

Table 1 BAMC Contract Budget

Task	Current Budget (7/05~7/07)	Extension Budget (7/07~7/09)	Total Budget (Current + Extension)
1. Develop Initial Work Plan and Schedule	\$132,600	\$0	\$132,600
2. Develop and Implement Project Controls Processes	\$4,005,206	\$4,113,267	\$8,118,473
3. Develop of Project Monitoring and Reporting Processes	\$1,574,873	\$1,316,302	\$2,891,175
4. Develop Baseline Program Forecast	\$272,989		\$272,989
5. On Call Services	\$2,314,332	\$1,470,431	\$3,784,763
Total	\$8,300,000	\$6,900,000	\$15,200,000



### **Item 3: Progress Report**

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** February 12, 2007

**FR:** Andrew Fremier, BATA Deputy Executive Director

**RE:** Agenda No. - 3a

Item- Draft February 2007 Monthly Progress Report

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**RECOMMENDATION:**

For Information Only

**COST:**

N/A

**SCHEDULE IMPACTS:**

N/A

**DISCUSSION:**

For the record, the PMT approved the December 2006 and January 2007 Monthly Progress Reports through delegated TBPOC authority on January 2, 2007 and February 5, 2007 respectively.

Attached is the draft February 2007 Monthly Progress Report for TBPOC review and comment. The PMT will approve the February 2007 Monthly Progress Report through delegated TBPOC authority as soon as updated expenditure data through February 28, 2007 becomes available.

**Attachment(s):**

1) Draft February 2007 Monthly Progress Report



## **Item 4: Program Issues**

***Memorandum***

**TO:** Toll Bridge Program Oversight Committee (TBPOC) **DATE:** February 12, 2007

**FR:** Tony Anziano, Caltrans Toll Bridge Program Manager

**RE:** Agenda No. - 4a

Item- Program Issues  
Final Strategy for Yerba Buena Island (YBI)

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**RECOMMENDATION:**

The following actions are recommended for approval:

- 1- Approval to proceed with West Tie-In Phase 1/YBI Viaduct replacement Labor Day weekend 2007;
- 2- Approval of South-South Detour (SSD) Contract Change Order (CCO) 64; and
- 3- Approval to revise budget and forecast as set forth below, on an interim basis, pending development of additional 1<sup>st</sup> quarter information over the next three months.

**COST:**

Implementation of the actions set forth below will add \$139 million in program costs.

**SCHEDULE:**

The proposed actions will create opportunities that will allow for early delivery of the corridor in the event the SAS contract is advanced. Even if SAS advancement is not achieved, these actions will significantly reduce overall corridor risk, significantly reducing the possibility of schedule delay.

**DISCUSSION**

**Background**

The SSD contract was awarded in 2004 with a schedule based on the original East Span project schedule that anticipated the new bridge being open to traffic in 2006. The SSD contract included both design and construction of the detour structure required for

## ***Memorandum***

construction of the Yerba Buena Island Transition Structure. The East Span project delay associated with lack of sufficient funding resulted in the SSD contract being suspended. When AB 144 was passed in 2005, all ongoing and future construction contracts for the East Span project, with one exception, were revised with a new bridge opening date of 2013. The sole exception to the schedule revision was the SSD contract.

In May 2006, the TBPOC took action to resolve SSD schedule issues and made a decision to take the following actions with respect to the SSD Contract:

- 1 – Maintain the proposed alignment for the SSD;
- 2 - Maintain the awarded contract (rather than terminating) utilizing the current contractor, CC Myers;
- 3 - Add foundation work for the Yerba Buena Island Transition Structure (YBITS) to the SSD contract by contract change order; and
- 4 - Remove design work for the East and West ends (tie-ins) of the SSD from the SSD contract and develop a new design for the tie-ins in-house (there was significant concern with the design proposed by CC Myers for the East Tie-In – it was an unusual design with several structural issues that remained unresolved by the designer of record).

The decision to continue the current SSD contract was based on several factors. CC Myers had performed a significant portion of the SSD work already, and termination and subsequent rebidding would put the Department in the position of acting as guarantor of work completed and materials purchased for any new prime contractor. Also, CC Myers was already extremely familiar with Yerba Buena Island (YBI) and in a much better position to advance work rapidly than would be a new prime contractor. In both instances, potential cost savings associated with rebidding was offset by a significant increase in risk to corridor schedule.

The YBITS foundation work was to be added to the SSD contract for two reasons. First, the YBITS foundation work could proceed immediately and SSD work could be paced to allow for development of new tie-in design as well as better timing for implementation of the detour (the detour will not be needed for several years, and without the YBITS work CC Myers would remain in a period of costly suspension or alternatively the SSD contract would have to be terminated). Second, foundation work is always the highest risk element of structure construction, and early construction of the foundations would significantly reduce risk (both in terms of cost and potential delay) to the East Span corridor schedule.

## ***Memorandum***

The TBPOC was recently presented with one element of the YBITS advance work. A need was identified to move quickly with work on pier W3L due to ABF stating that they needed access to this area of YBI as early as March 2007 to maintain schedule for the SAS. In December 2006, the TBPOC gave approval to negotiate a CCO with CC Myers for this work in an amount not to exceed \$7 million. The CCO has been negotiated with an agreed upon price of \$5.835 million and is now being brought back to the TBPOC for final approval.

The tie-in and YBITS foundation design has proceeded to a point where reasonable cost estimating can be performed. The agreed upon price for Pier W3 serves as a good measure to validate these estimates with respect to the YBITS advance work. The new East Tie-In design is more costly but significantly less risky than the design originally developed by the contractor. The West Tie-In design is also more costly but incorporates required retrofit of the YBI Viaduct adjacent to the YBI tunnel. Originally the YBI Viaduct was to be retrofitted but the retrofit was not the preferred design – complete replacement was always the preferred design. However, designers originally believed they were constrained by an inability to close the bridge for any period during construction. This would have caused the YBI Viaduct to become the controlling segment of the entire lifeline corridor in the event of a major earthquake. Retrofit of the YBI Viaduct was particularly challenging, as it is an older structure that has undergone significant modification over time. It was difficult to assess its potential response to a seismic event as well as difficult to develop and construct a retrofit plan. The new West Tie-In design a weekend bridge closure but incorporates a permanent replacement structure for the viaduct and will improve its seismic performance. In addition, replacement of the YBI Viaduct will advance seismic safety for this portion of the East Span – work on the YBI Viaduct was originally scheduled for completion as part of YBITS in 2013 but now seismic safety will be achieved as early as 2007.

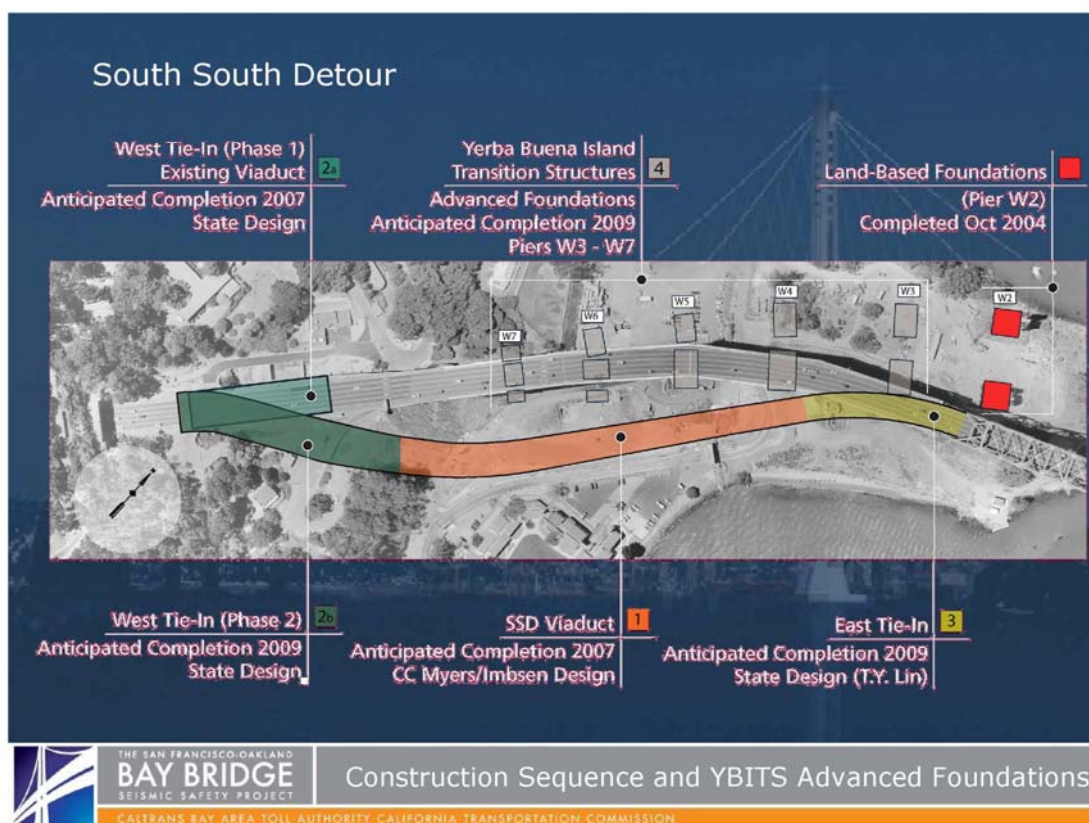
Both the East and West Tie-Ins will require bridge closures but for limited periods similar to closures that have already been successfully implemented during the West Approach project. Two of the required closures are different from the West Approach closures in one way – the work must be complete for the bridge to reopen. The first required closure will require a three-day weekend and should occur as early as Labor Day weekend of 2007 to minimize risk to corridor schedule. The next viable (in terms of traffic volumes, business closure and number of events) three-day weekend would be Memorial Day of 2008, a significant time after Labor Day 2007, almost nine months later. The proposed work has been reviewed by the CC Myers, and CC Myers has conducted a detailed schedule analysis and has concluded that the work can be completed within the time available on a three-day weekend with some float available to address any delays.



**Memorandum**

There are five discrete elements of work on YBI, as shown in the YBI Summary diagram below. The elements are:

- 1 - the SSD Viaduct;
- 2a - the West Tie-In Phase 1/YBI Viaduct replacement;
- 2b - the West Tie-In Phase 2;
- 3 - the East Tie-In; and
- 4 - the YBITS Advanced Foundation work.



The work on YBI will progress in the following order, as shown in the figures below (full page prints of these figures are attached to this memo).

***Memorandum***

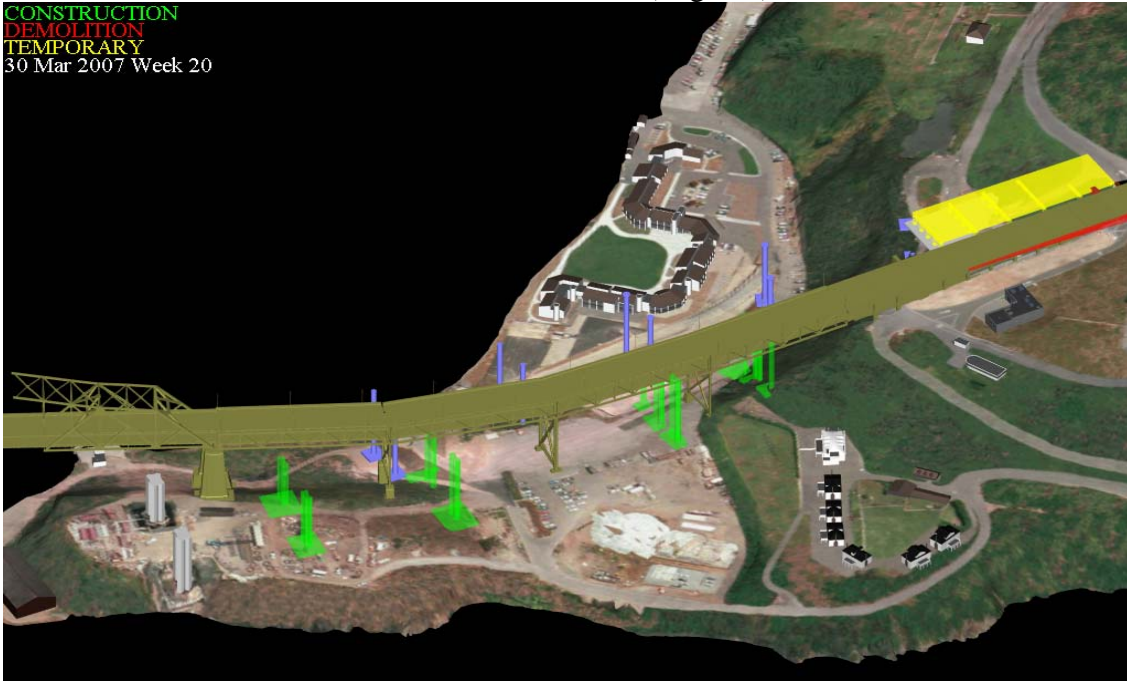
First, work will be completed on the SSD foundations and columns (in blue) and on the foundation and column for YBITS Pier W3L (in green).

CONSTRUCTION  
DEMOLITION  
TEMPORARY  
15 Feb 2007 Week 14



Next, the contractor builds the staging platform (in yellow) and the foundations and columns (in red) for the West Tie-In/YBI Viaduct Replacement and the foundations and columns for YBITS Piers W3R, W4, W6 and W7 (in green).

CONSTRUCTION  
DEMOLITION  
TEMPORARY  
30 Mar 2007 Week 20

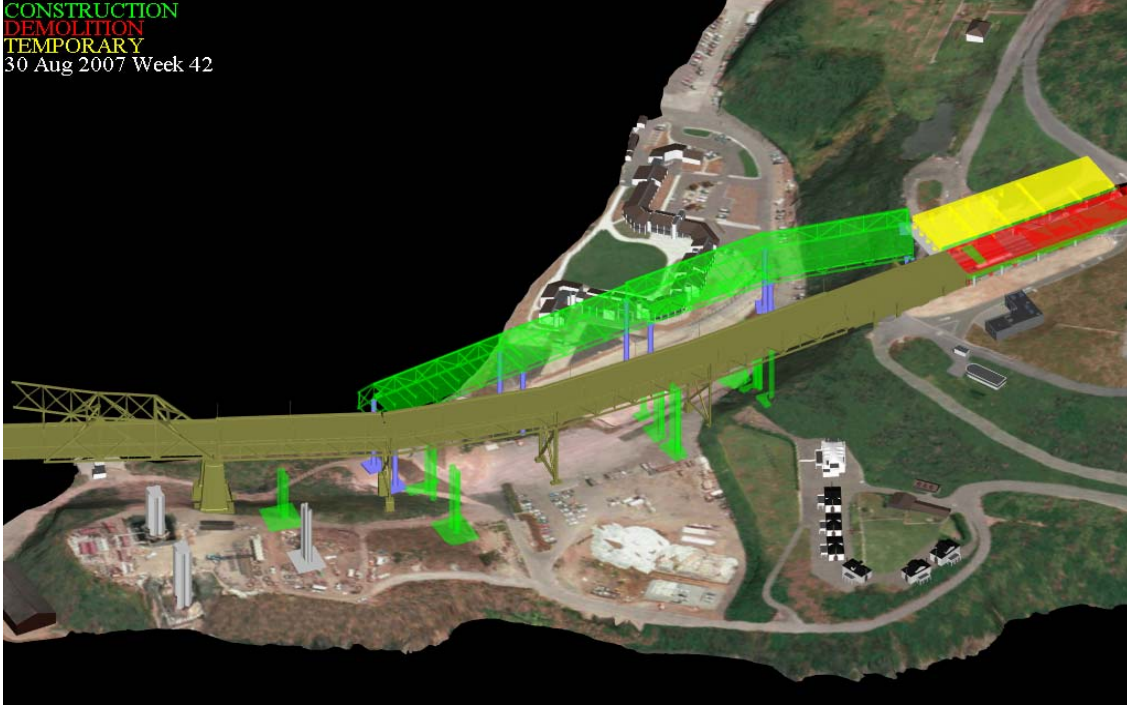




***Memorandum***

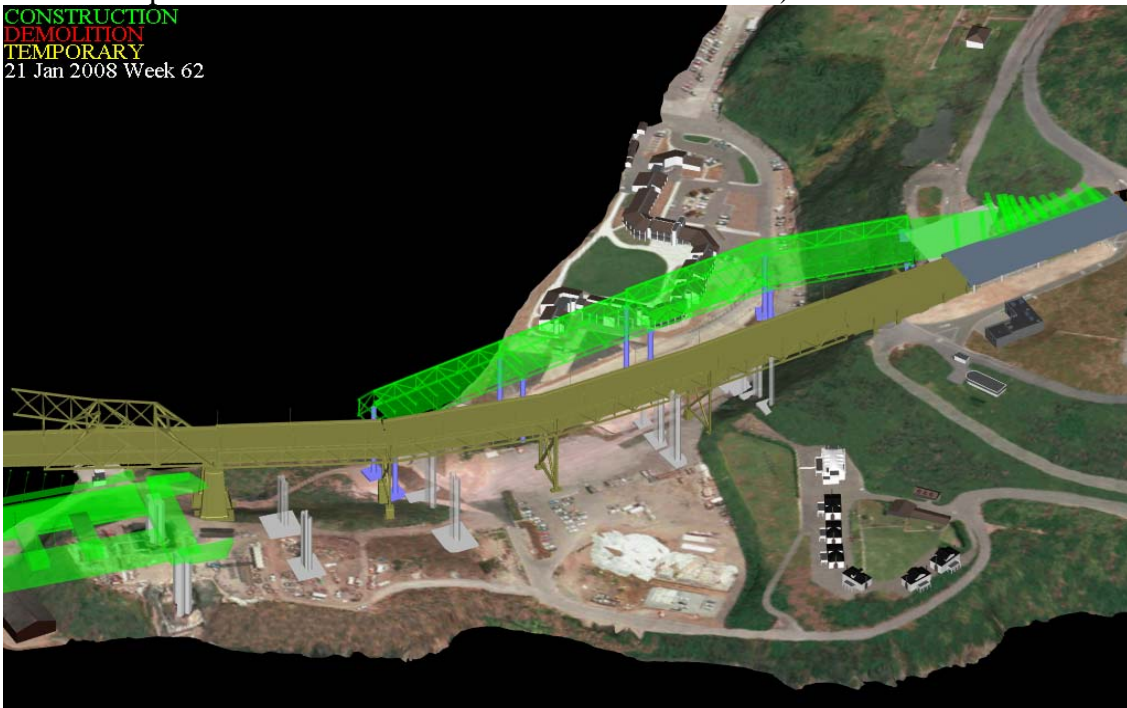
The SSD Viaduct (in green) is erected, and preparations are made (in red) for the demolition of the existing top deck and columns of the YBI Viaduct.

CONSTRUCTION  
DEMOLITION  
TEMPORARY  
30 Aug 2007 Week 42



The top deck for the YBI Viaduct Replacement (in blue/grey at the right center) is rolled into place (additional detailed figures showing the order of work specifically for the YBI Viaduct Replacement/West Tie-In are attached to this memo).

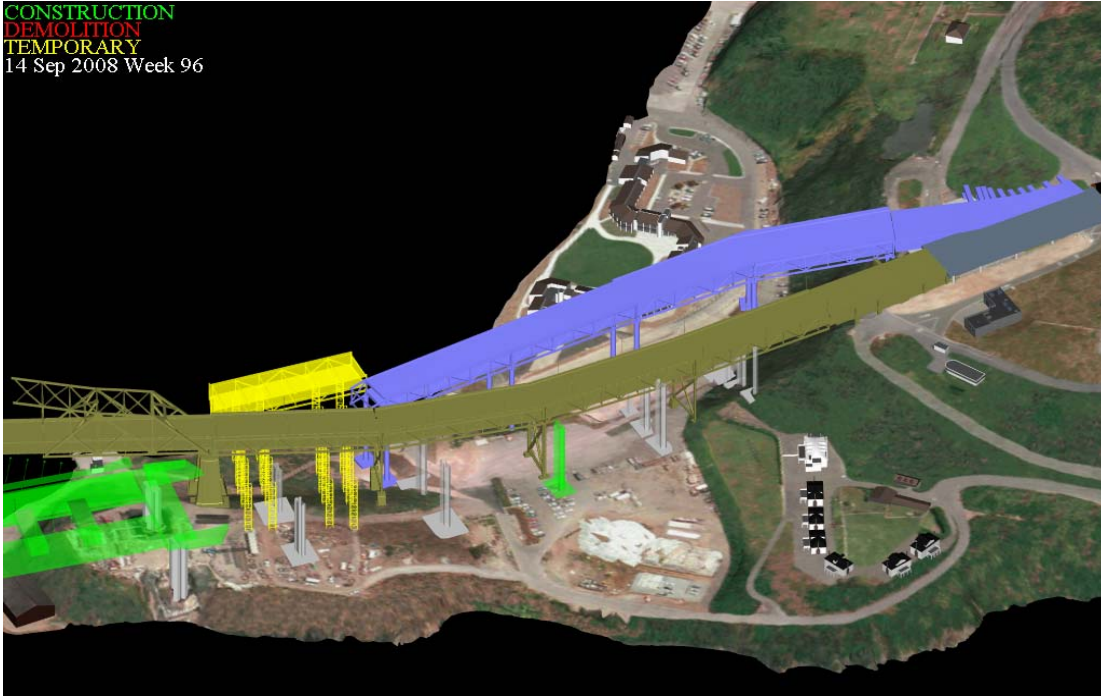
CONSTRUCTION  
DEMOLITION  
TEMPORARY  
21 Jan 2008 Week 62



***Memorandum***

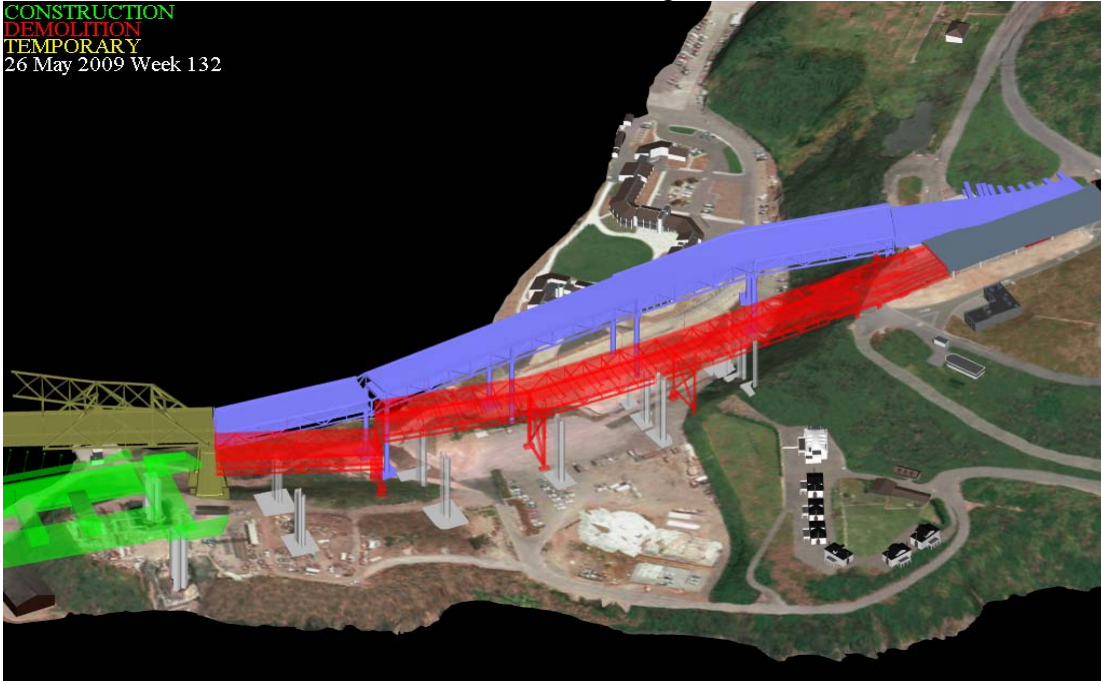
The East Tie-In (in yellow) is erected and prepared for roll in. Work begins on YBITS Pier W5.

CONSTRUCTION  
DEMOLITION  
TEMPORARY  
14 Sep 2008 Week 96



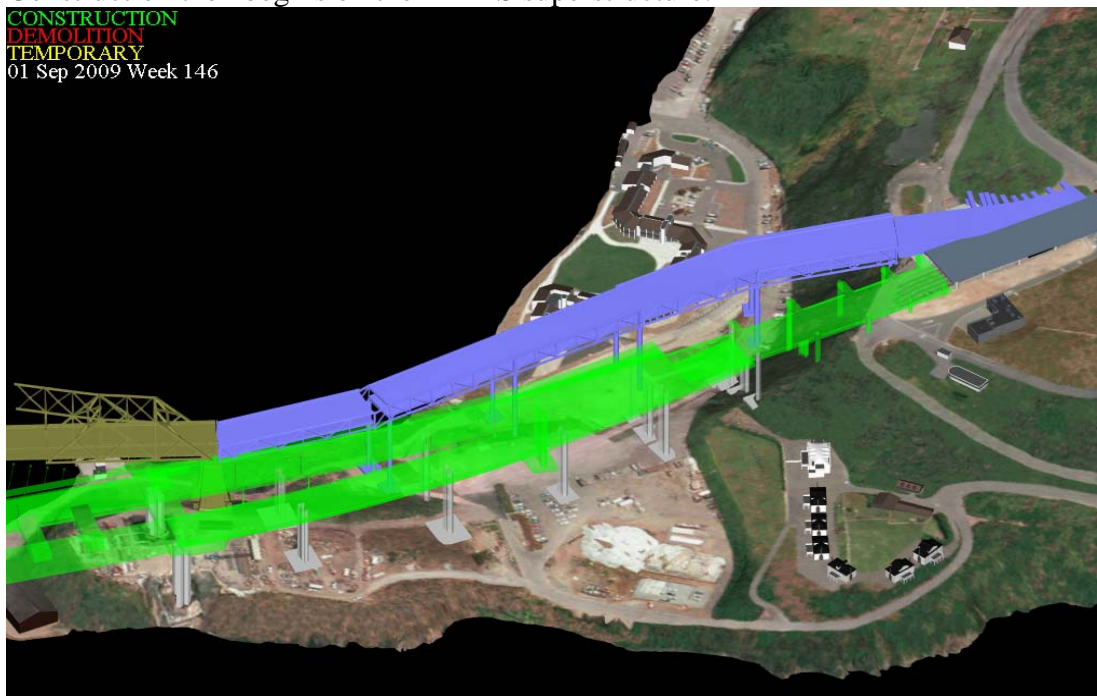
The East Tie-In (in blue) is rolled in and the existing structure (in red) is demolished.

CONSTRUCTION  
DEMOLITION  
TEMPORARY  
26 May 2009 Week 132





Construction then begins on the YBITS superstructure.



The additional SSD contract costs associated with the YBI work discussed in this memo will be included in the 1<sup>st</sup> Quarter 2007 report as revisions to budget and forecast for the SSD contract. The 1<sup>st</sup> Quarter budget and forecast cannot be finalized until 1<sup>st</sup> Quarter risk management numbers become available, approximately two months from now. The specific distinction between budget and forecast, if any, will be dependent on these risk management numbers. A final recommendation for revised budget and forecast will be submitted to the TBPOC at that time. The following analysis shows likely impact to forecast based on known values at this time.

If the 1<sup>st</sup> Quarter forecast were to be made at this time, the additional costs would be as follows. The 4<sup>th</sup> Quarter 2006 forecast for the SSD contract was \$152.2 million. The proposed revision for the 1st Quarter forecast, including YBITS foundation work is \$334.4 million. The increase consists of the following primary elements:

SSD Viaduct -	no change
YBI Viaduct replacement	
(West Tie-In Phase 1) -	\$ 40 million
West Tie-In Phase 2	\$ 13 million
Revised East Tie-In design -	\$ 34 million
YBITS advance foundation work -	\$ 110.5million

## ***Memorandum***

The 4th quarter forecast included \$ 15.3 million in risk management dollars associated with the work that is now included in the estimates above. The revised forecast is therefore \$152.2 million (the 4th quarter forecast) + \$197.5 million (additional items listed above) - \$15.3 million (reduction in risk management) = \$334.4 million.

Because some YBITS work is being transferred from the YBITS contract to the SSD contract, the YBITS forecast will also be revised for the 1st quarter. However, this will not be a dollar for dollar reduction from the 4<sup>th</sup> to 1<sup>st</sup> quarters. The 4<sup>th</sup> quarter forecast for the YBITS contract was \$ 318.5 million. The 1<sup>st</sup> quarter forecast for the YBITS contract is \$276.1 million. The forecast revision only represents a reduction of \$ 42.4 million, not the \$110.5 million now included in the SSD contract. There are two reasons for this. First, it is anticipated that it will be more costly (but less risky) to include the YBITS foundation work by CCO (the estimated additional cost is \$23.5 million, which is included in the total cost of \$ 110.5 million above). Second, the YBITS estimate has been updated as part of the overall estimating associated with the transfer of YBITS work to the SSD contract, and the estimate for the work remaining in the YBITS contract has increased by \$44.6 million. The revised forecast is therefore \$318.5 (the 4<sup>th</sup> quarter forecast) - \$87 million (transfer of work from the YBITS contract to the SSD contract) + \$44.6 million (updated estimate of cost increases) = \$276.1 million. This increased cost is another way of viewing the reduction in risk associated with advancing the YBITS foundation and column work by including it in the SSD contract. Unforeseen escalation remains a problem in estimating. Materials markets remain highly volatile, as seen recently with the unprecedented rise in copper prices that led in large part to the high initial bid on the submarine cable project.

A key point from this analysis is that the inclusion of YBITS advance work in the SSD contract only accounts for \$23.5 million of the overall cost increases. The balance of the increases are associated with required SSD design work and associated plan revisions and construction escalation. This \$23.5 million is buying risk reduction as well as the opportunity to advance corridor schedule.

These forecast revisions will require a revision to the forecast program contingency, as the SSD contract has no remaining available project contingency/risk management reserve. The 4<sup>th</sup> quarter forecast for program contingency was \$940.7 million. The proposed forecast revisions discussed above will lead to a reduction in forecast program contingency by \$139.8 million and a 1<sup>st</sup> quarter forecast of \$800.9 million in program contingency.

**Memorandum**

In summary, the forecast revisions are as follows:

<b>South South Detour (SSD)</b>		<b>Yerba Buena Island Transition Structures (YBITS)</b>		<b>Program Contingency</b>	
4 <sup>th</sup> Quarter Forecast	<u>152.2</u>	4th Quarter Forecast	<u>318.5</u>	4th Quarter Forecast	<u>940.7</u>
<b><u>Forecast Adjustment</u></b>		<b><u>Forecast Adjustment</u></b>		<b><u>Forecast Adjustment</u></b>	
2a) West Tie-in Phase 1	40.0	YBITS Adv. Credit	-87.0	SSD Forecast Change	-182.2
2b) West Tie-in Phase 2	13.0	Escalation	44.6	YBITS Forecast Change	42.4
3) East Tie-in	34.0			Total 1	<u>800.9</u>
Subtotal Tie-Ins	87.0				
YBITS Advance	110.5				
Risk Adjustment	-15.3				
Revised Forecast	<u>334.4</u>	Revised Forecast	<u>276.1</u>		
Forecast Change	182.2	Forecast Change	-42.4		

The impact of the SSD contract forecast revision to program contingency will have to be viewed in light of the status of all corridor projects. Five other East Span projects (SAS, OTD 1, OTD 2, YBITS and Demolition) have in excess of \$300 million in available project contingency/risk management dollars remaining before these projects would potentially require access to program contingency reserves. In addition, the Skyway and E2/T1 projects have in excess of \$100 million in available project contingency/risk management dollars remaining; some of this will be required to resolve outstanding risks but a significant portion of this is likely to be returned as a replenishment to the program contingency upon completion of the projects.

***Memorandum***

This is the final major adjustment associated with the program delay incurred in 2004-2005. It significantly reduces overall corridor schedule risk and provides for efficient use of the resources of CC Myers. The strategy originally approved by the TBPOC has already led to a demonstrable benefit to overall corridor schedule. The prime contractor for the Self-Anchored Suspension Span contract, ABF, recently requested early access to an area of YBI that will be occupied by YBITS foundation construction. Access was requested to begin in March 2007. Since CC Myers is already mobilized and very familiar with YBI, they were able to proceed immediately with the YBITS foundation work in the requested access area and the foundation work will be completed well ahead of the requested access date. Work is almost complete at this time:



This will help ABF keep on schedule and eliminates the risk of both this element of foundation work and the possibility of future conflicts between ABF and the contractor responsible for the remainder of the YBITS work. In summary, the benefits of the recommended actions are:

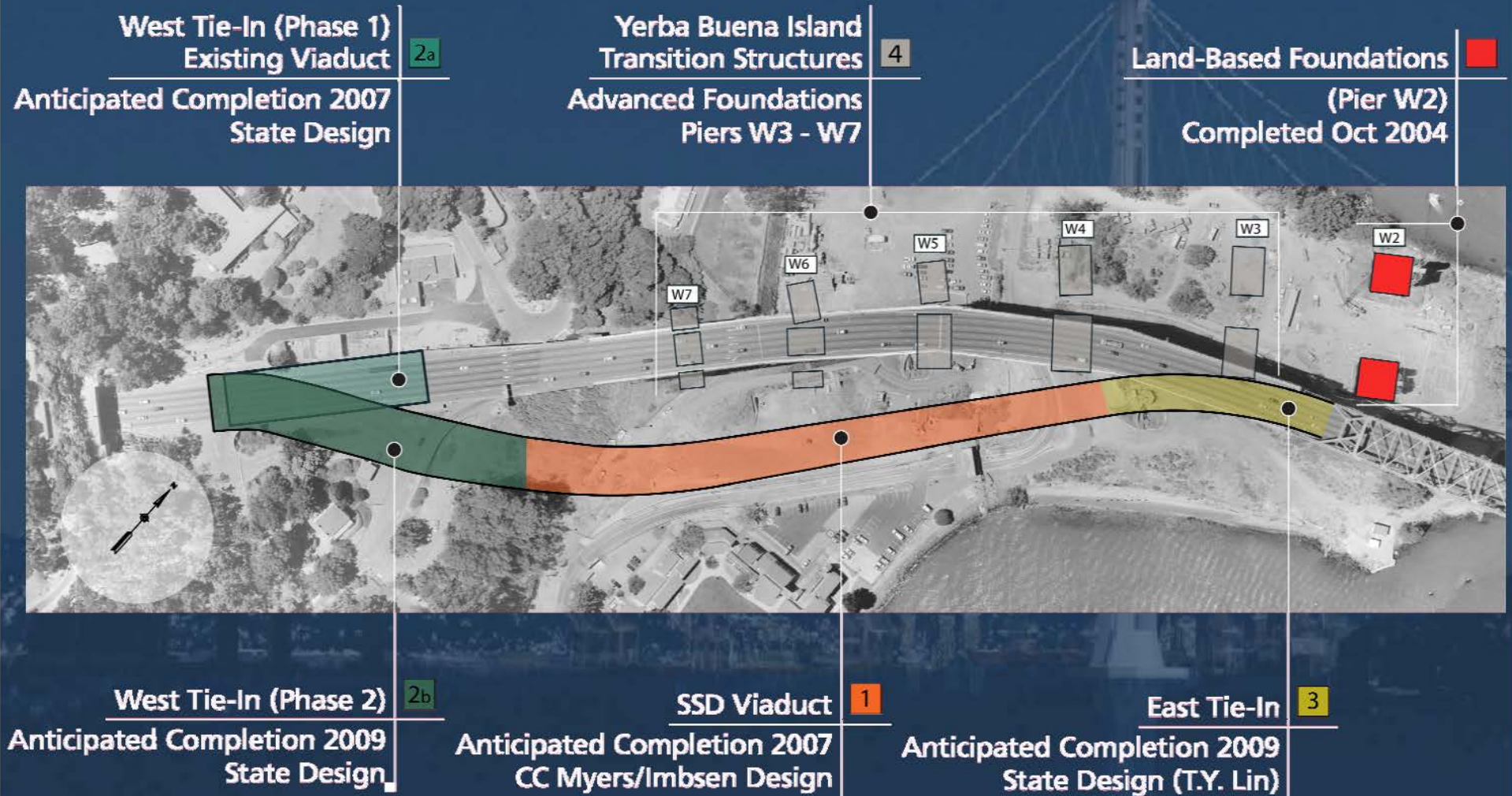
Overall risk reduction to corridor schedule;

Early delivery of seismic safety on YBI Viaduct; and

Aligns SSD and YBITS contract work with early delivery of SAS, providing opportunity for early delivery of seismic safety in the entire corridor.



# South South Detour



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Construction Sequence and YBITS Advanced Foundations

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CONSTRUCTION  
DEMOLITION  
TEMPORARY  
15 Feb 2007 Week 14



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CONSTRUCTION  
DEMOLITION  
TEMPORARY  
30 Mar 2007 Week 20

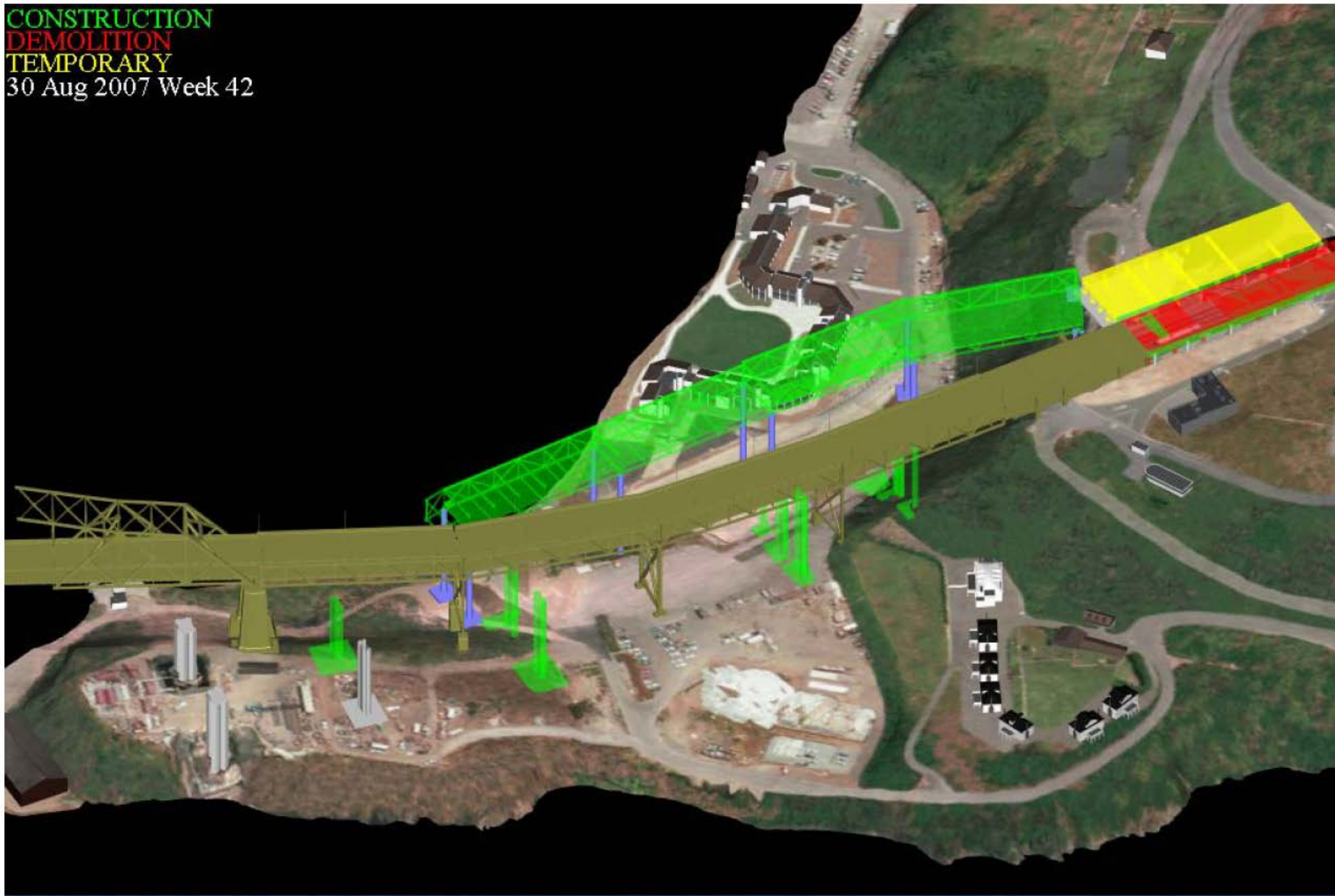


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CONSTRUCTION  
DEMOLITION  
TEMPORARY  
30 Aug 2007 Week 42



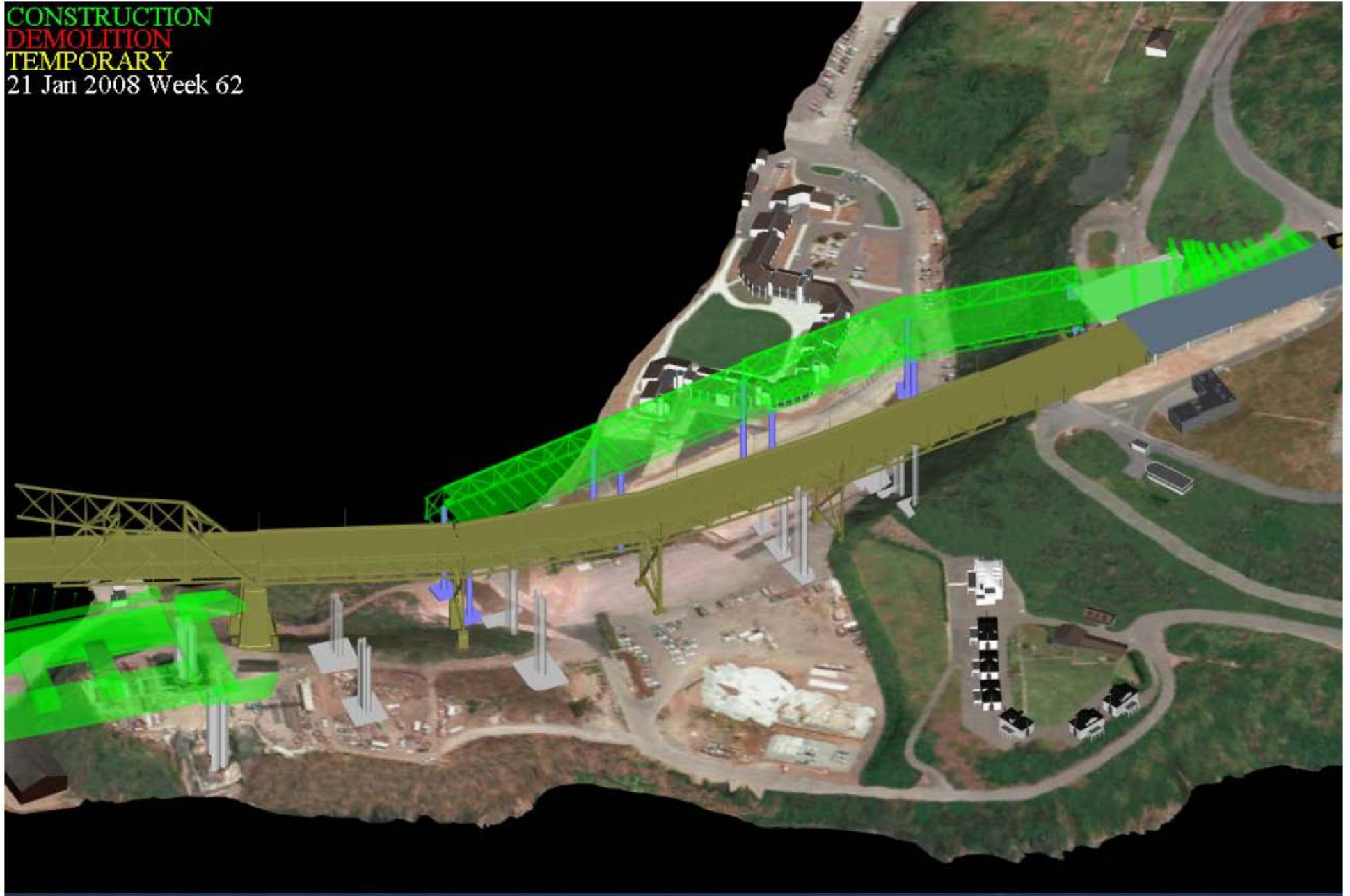
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CONSTRUCTION  
DEMOLITION  
TEMPORARY  
21 Jan 2008 Week 62

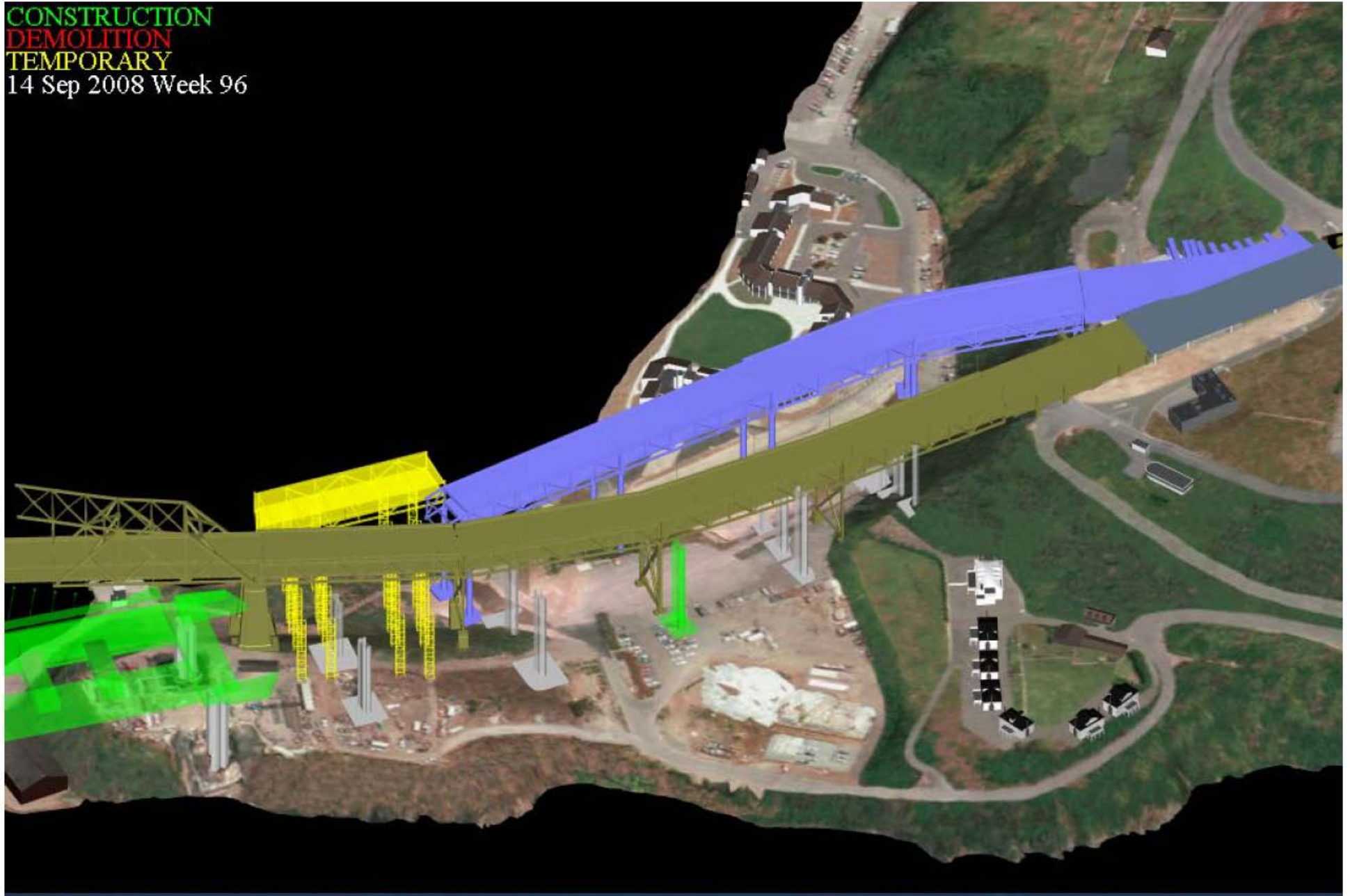


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CONSTRUCTION  
DEMOLITION  
TEMPORARY  
14 Sep 2008 Week 96



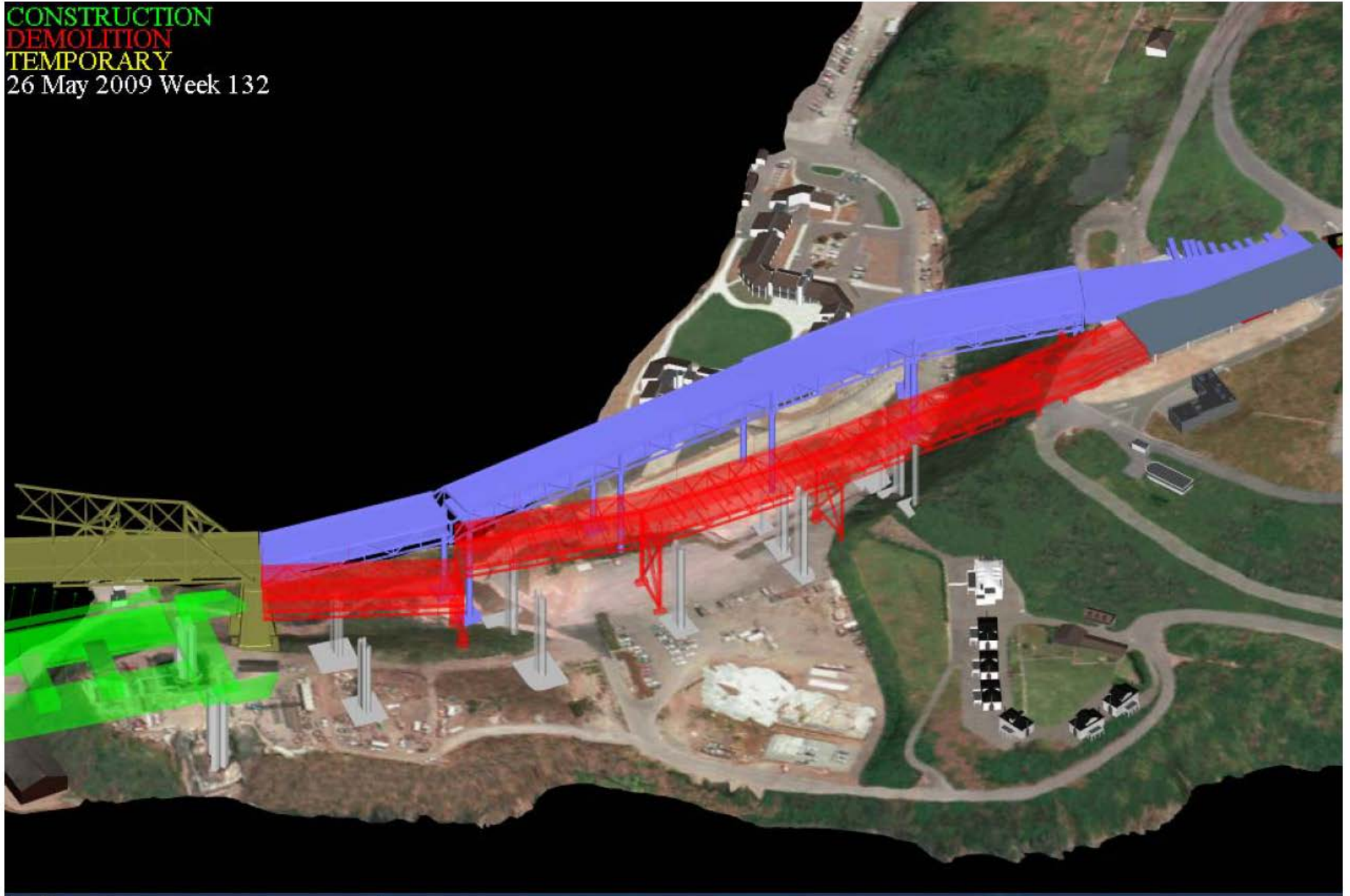
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CONSTRUCTION  
DEMOLITION  
TEMPORARY  
26 May 2009 Week 132

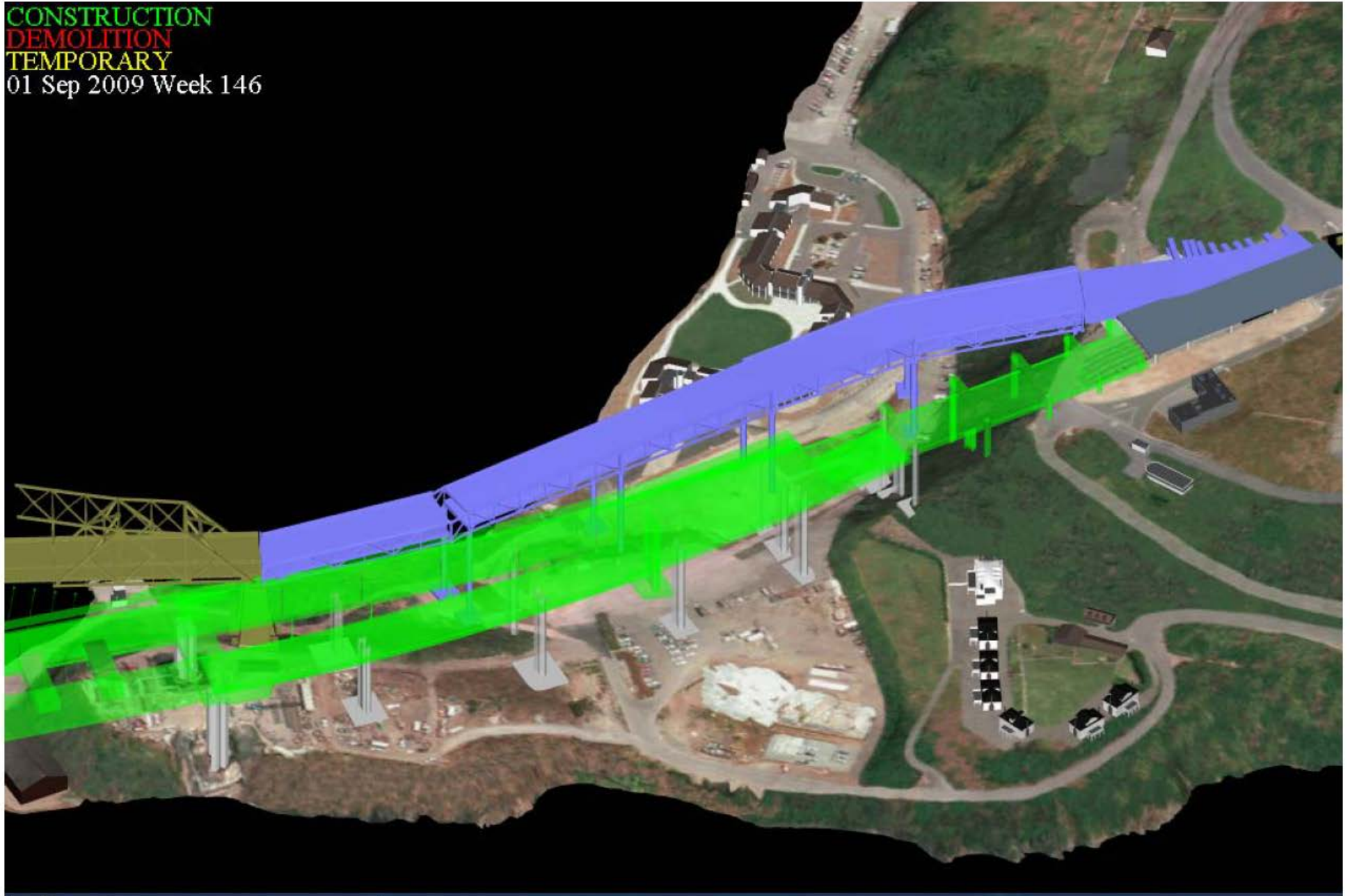


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CONSTRUCTION  
DEMOLITION  
TEMPORARY  
01 Sep 2009 Week 146



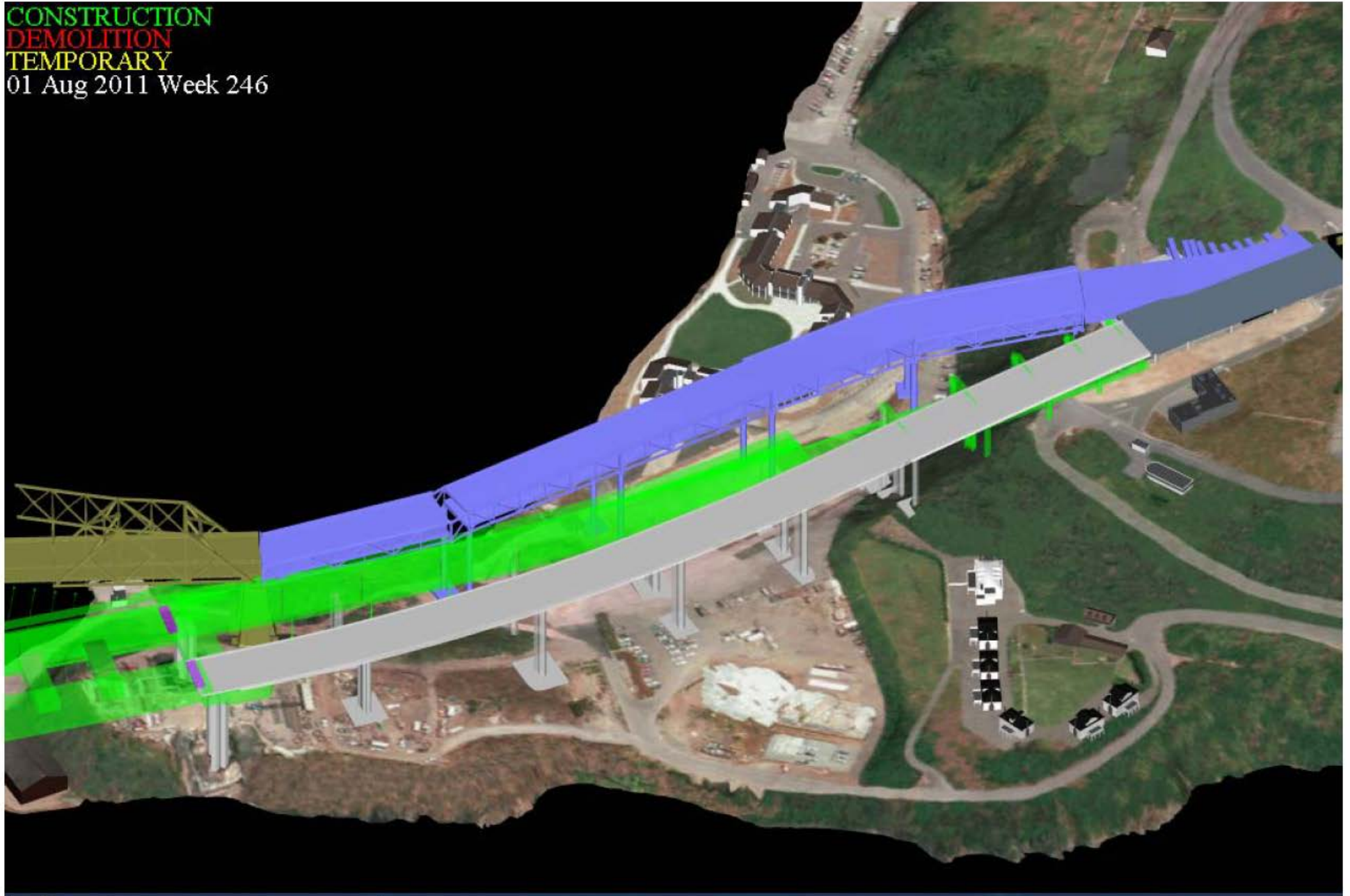
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CONSTRUCTION  
DEMOLITION  
TEMPORARY  
01 Aug 2011 Week 246

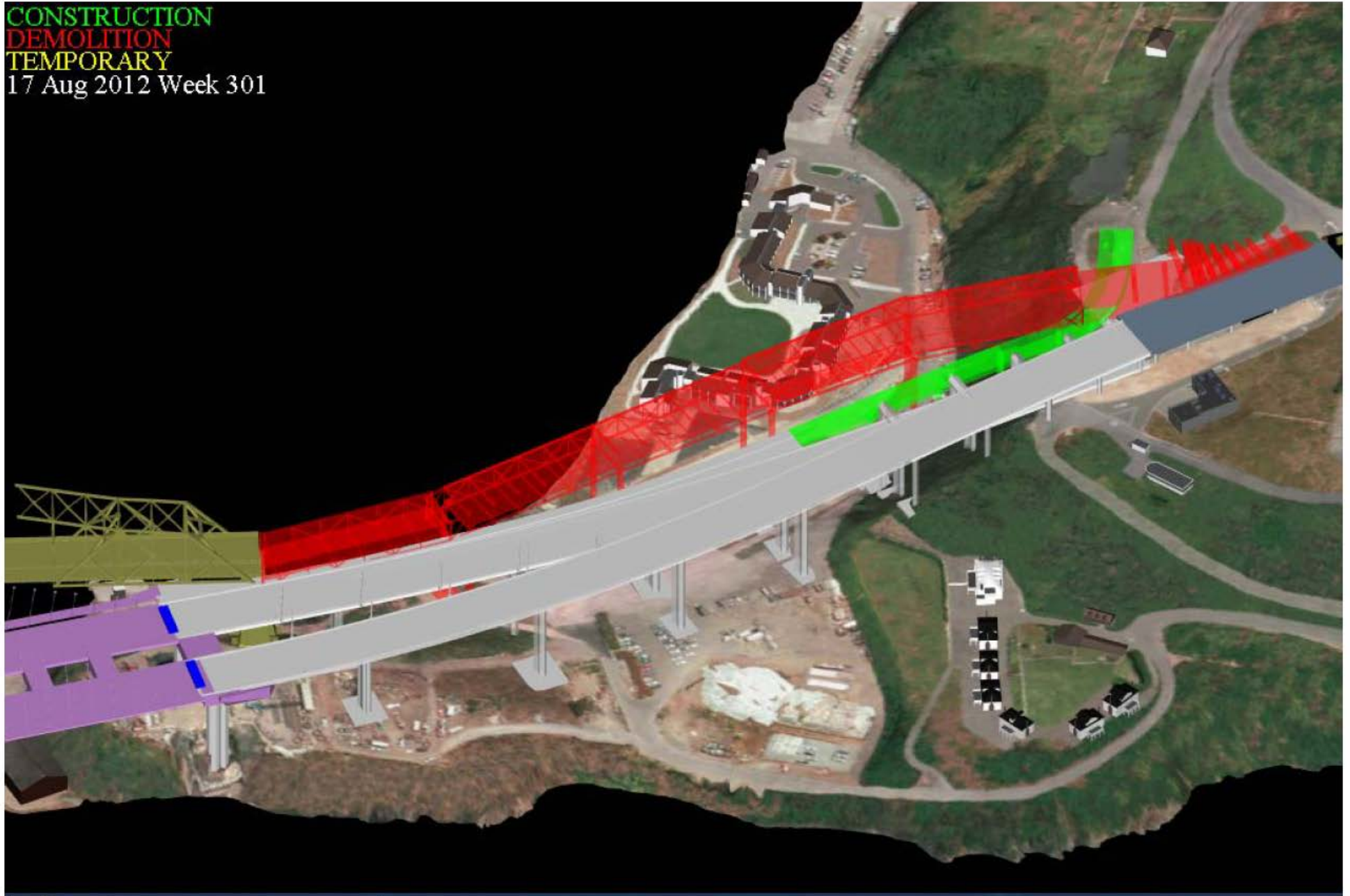


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CONSTRUCTION  
DEMOLITION  
TEMPORARY  
17 Aug 2012 Week 301



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CONSTRUCTION  
DEMOLITION  
TEMPORARY  
08 Apr 2013 Week 334



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CONSTRUCTION  
DEMOLITION  
TEMPORARY  
27 Dec 2013 Week 372



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# WTI Phase 1 – North/South Side Preparation



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# WTI Phase 1 – North/South Side Preparation

01.12.07-01.25.07 Close EB / WB ramps and access road.



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# WTI Phase 1 – North/South Side Preparation



02.01.07-02.23-07 Retrofit footing 40A



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# WTI Phase 1 – North/South Side Preparation

02.02.07-02.20.07 Demolition of north overhang



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# WTI Phase 1 – North/South Side Preparation

02.07.07-04.26.07 Excavate south staging area / construct retaining wall



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# WTI Phase 1 – North/South Side Preparation



02.28.07-04.10.07 CIDH piles north side



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# WTI Phase 1 – North/South Side Preparation



03.19.07-03.23.07 Demo outrigger column 40A



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# WTI Phase 1 – North/South Side Preparation



04.11.07-04.19.07 Demo existing wall between north columns



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# WTI Phase 1 – North/South Side Preparation

04.27.07-06.08.07 CIDH piles south side



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# WTI Phase 1 – North/South Side Preparation



04.20.07-05.03.07 Excavate between B39N and B44N to grade



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10



# WTI Phase 1 – North/South Side Preparation



04.20.07-05.11.07 Column construction north side



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# WTI Phase 1 – North/South Side Preparation



05.11.07-06.15.07 Column construction south side



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# WTI Phase 1 – New Viaduct Construction



05.25.07-06.15.07 Build false-work



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# WTI Phase 1 – New Viaduct Construction

06.11.07-08.24.07 Form/Rebar/Pour Deck



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# WTI Phase 1 – New Viaduct Construction

08.24.07-08.29.07 Deck complete, construct barrier rail



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15



# WTI Phase 1 – Demo Existing and Roll-in New Viaduct

08.27.07-08.29.07 Install moving apparatus in south staging area



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16



# WTI Phase 1 – Demo Existing and Roll-in New Viaduct

08.31.07 Close Route 80



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# WTI Phase 1 – Demo Existing and Roll-in New Viaduct



09.01.07-09.03.07 Demo existing viaduct B45-B39



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# WTI Phase 1 – Demo Existing and Roll-in New Viaduct



09.01.07-09.03.07 Demo existing viaduct B45-B48



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# WTI Phase 1 – Demo Existing and Roll-in New Viaduct

09.01.07-09.03.07 Install remaining moving apparatus



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20



# WTI Phase 1 – Demo Existing and Roll-in New Viaduct

09.01.07-09.03.07 Move CIP box into place



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21



# WTI Phase 1 – Demo Existing and Roll-in New Viaduct



09.01.07-09.03.07 Construct joints at BB and EB



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# WTI Phase 1 – Demo Existing and Roll-in New Viaduct



09.01.07-09.03.07 Remove moving apparatus from Route 80



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# WTI Phase 1 – Demo Existing and Roll-in New Viaduct



09.04.07 Open Route 80



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**CONTRACT CHANGE ORDER MEMORANDUM**

DATE: 12/14/2006 Page 1 of 2

TO: PETER SIEGENTHALER / JASON TOM			FILE: <b>E.A.</b> 04 - 0120R4	
FROM: MAHANTESH ANIGOL			<b>CO-RTE-PM</b> SF-80-12.6/13.2	
			<b>FED. NO.</b> ACBRIM-080-1(097)N	
CCO#: <b>64</b>	SUPPLEMENT#: <b>1</b>	Category Code: <b>BZZZ</b>	CONTINGENCY BALANCE (incl. this change): <b>\$28,829,810.51</b>	
COST: <b>\$5,835,000.00</b> INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>			HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SUPPLEMENTAL FUNDS PROVIDED: <b>\$0.00</b>			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
<b>CCO DESCRIPTION:</b> YBITS Advance Work / Footing at W3L			<b>PROJECT DESCRIPTION:</b> CONSTRUCT ROUTE 80 TEMP BYPASS STRUCTURE	
Original Contract Time: <b>475</b> Day(s)	Time Adj. This Change: <b>0</b> Day(s)	Previously Approved CCO Time Adjustments: <b>381</b> Day(s)	Percentage Time Adjusted: (including this change) <b>80</b> %	Total # of Unreconciled Deferred Time CCO(s): (including this change) <b>7</b>

**THIS CHANGE ORDER PROVIDES FOR:**

Construct the footing and column for the Yerba Buena Island Transition Structures at Bent W3 Left to the elevation of 16M at rebar splice locations above the top of footing in accordance with the attached plans and specifications and as directed by the Engineer. Supply and install tie-downs and backfill the footing to finished grade.

Produce integrated shop drawings (ISD) for the column to footing and column to bent cap interfaces in accordance with the attached specifications. ISDs are required to resolve potential conflicts between rebar and prestressing systems early and to mitigate future delays during the Yerba Buena Island Transition Structure (YBITS) construction.

This work shall be completed by March 15, 2007 in order to allow the adjacent contractor (American Bridge - Fluor, Joint Venture) to occupy the area. The footprint of the W3L footing is within the area required for use by the adjacent Self Anchored Suspension Span (SAS) contract Contractor. As a result, this work must be completed by March 15, 2007 to prevent delays on that contract. All work not completed by this date will be left protected in place until the next available work window whereby the balance of the outstanding work will be completed with no additional compensation allowed.

To mitigate the potential of having more than one contractor occupying the same work area and to meet the goal of achieving seismic safety, portions of the Yerba Buena Island Transition Structures (YBITS) are to be completed on this project. This will mitigate the future risks related to foundation construction which includes but is not limited to buried man made objects, differing site conditions, and hazardous materials. As the design of the Tie-In portions of the TBS will not be completed until late 2007, this added work will pace the Contractor and keep the necessary forces in place. This change is in accordance with the document titled "Recommendation to Construct Select Yerba Buena Island Transition Structure Foundations by Contract Change Order", dated December 14, 2006.

Payment for the completion of the foundation and column and Bent W3 left will be at Adjustment of Compensation at Agreed Lump Sum Price of \$5,775,000.00, which can be financed from the contingency fund.

Payment for the completion of the integrated shop drawings for Bent W3L will be done at extra work at force account for an estimated cost of \$80,000.00, which can be financed from the contingency fund.

The advancement of Bents W3R, W4L&R, W5L&R, W6L&R and W7 Ramp will be addressed in a future change order.

This change was requested by Brian Maroney - Deputy Toll Bridge Program Manager and is in concurrence with Ken Terpstra - Project Manager, Peter Siegenthaler - SFOBB Construction Manager Principal Bridge Engineer, Jason Tom - Area Construction Manager Supervising Bridge Engineer, Robert Kobal - HQ Asst. Construction Coordinator, Tom Ostrom - Office of Structure Design, Trihn Lai - Project Engineer, and Rich Olander - CT Maintenance.

Supporting documents and information relative to this change order are on file with the project records.

No adjustment in contract time will be made since this work is not a controlling item.

Approval of this change order is recommended by the Resident Engineer.



**CONTRACT CHANGE ORDER MEMORANDUM**

<b>CONCURRED BY:</b>			<b>ESTIMATE OF COST</b>		
Construction Engineer:	Mahantesh Anigol, RE	Date	THIS REQUEST		TOTAL TO DATE
Bridge Engineer:	Tom Ostrom, OSD	Date	ITEMS	\$0.00	\$0.00
Project Engineer:	Trinh Lai	Date	FORCE ACCOUNT	\$80,000.00	\$230,000.00
Project Manager:	Ken Terpstra, Project Manager	Date 11/21/06	AGREED PRICE	\$0.00	\$0.00
FHWA Rep.:		Date	ADJUSTMENT	\$5,755,000.00	\$5,755,000.00
Environmental:		Date	<b>TOTAL</b>	\$5,835,000.00	\$5,985,000.00
Other (specify):	Brian Maroney, Dpty. TB Manager	Date 11/21/06	<b>FEDERAL PARTICIPATION</b>		
Other (specify):	Rob Kobal, HQ Asst. Const. Coord.	Date	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING		
District Prior Approval By:		Date	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)		
HQ (Issue Approve) By:	Ken Darby, HQ CCO Desk	Date	<input checked="" type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS		
Resident Engineer's Signature:		Date	FEDERAL FUNDING SOURCE      PERCENT _____ _____ _____		

**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

<b>CCO: 64</b>	<b>Suppl. No. 1</b>	<b>Contract No. 04 - 0120R4</b>	<b>Road SF-80-12.6/13.2</b>	<b>FED. AID LOC.: ACBRIM-080-1(097)N</b>
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**To: CC MYERS INC**

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

**Extra Work at Force Account:**

Produce integrated shop drawings (ISD) for the column to footing and column to bent cap interfaces at Bent W3L in accordance with the attached specifications. Generate ISD for the placement of bar reinforcing steel based upon the final conflict free computer-generated model. Conflicts between reinforcing in the footing and column interfaces, and in between the column reinforcing and the future superstructure prestressing system shall be resolved by the ISD process.

This work shall be completed prior to the start of column reinforcing steel fabrication.

For this work, payment will be in accordance with Section 4-1.03D, Extra Work, of the Standard Specifications, and Section 5-1.24, Force Account Payment, of the Special Provisions, and no other compensation will be allowed therefor.

No adjustment in contract time will be made since this work is not a controlling operation.

The contractor shall ensure that all rebar be placed in accordance with the conflict-free ISDs.

Estimated cost of Extra Work at Force Account .....\$80,000.00

**Adjustment of Compensation at Lump Sum:**

Construct the footing, and column for the Yerba Buena Island Transition Structures at Bent W3 Left to the elevation of 16M above the top of footing in accordance with the attached plans and specifications and as directed by the Engineer. Supply and install tie-downs and backfill the footing to finished grade.

This work shall be completed by March 15, 2007. Should the work not be completed, at no additional cost to the State, the partially completed footing and column shall be protected in place from exposure to the elements and corrosion, and the area shall be backfilled and restored to the existing elevation. At the next available work window, the balance of the outstanding work shall be completed with no additional compensation allowed.

For this work, the Contractor will be paid the sum of \$5,755,000.00. This amount constitutes full compensation, including markups, for the work of this change.

All work shall be performed in accordance with the contract Special Provisions and Standard Specifications.

Total Cost of Adjustment of Compensation at Agreed Lump Sum.....\$5,755,000.00



**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

CCO: <b>64</b>	Suppl. No. <b>1</b>	Contract No. <b>04 - 0120R4</b>	Road <b>SF-80-12.6/13.2</b>	<b>FED. AID LOC.:</b> ACBRIM-080-1(097)N
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Estimated Cost: Increase ☒ Decrease ☐ **\$5,835,000.00**

By reason of this order the time of completion will be adjusted as follows: 0 days

**Submitted by**

Signature	Resident Engineer: MAHANTESH ANIGOL	Date
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**Approval Recommended by**

Signature	Construction Engineer: JASON TOM	Date
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**Engineer Approval by**

Signature	(Print name and title) PETER SIEGENTHALER - Chief	Date
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We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, materials, and labor necessary to complete the work above specified, and will accept as full payment therefor the prices shown above.

**NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.**

**Contractor Acceptance by**

Signature	(Print name and title)	Date
-----------	------------------------	------

## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** February 12, 2007

**FR:** PMT:

Tony Anziano, Toll Bridge Program Manager, Caltrans  
Andrew Fremier, Deputy Executive Director, BATA  
Stephen Maller, Deputy Director, CTC

**RE:** Agenda No. - 4b  
Program Issues  
Item- TBSRP Strategic Plan

---

**RECOMMENDATION:**

Approval of the TBSRP Strategic Plan – East Span Focus

**COST:**

N/A

**SCHEDULE:**

N/A

**DISCUSSION:**

Attached is the TBSRP Strategic Plan (East Span focus) presented by the PMT for approval. The PMT developed the Strategic Plan in response to TBPOC's request for information on strategies for early delivery of the San Francisco-Oakland Bay Bridge East Span. The Strategic Plan provides an overview of the goals, objectives, and tactics for completing the East Span by October 2012.

**Attachment(s):**

- 1) TBSRP Strategic Plan – East Span Focus



# TBSRP Strategic Plan

## SFOBB East Span Focus

February 15, 2007


Presented to: TBPOC

Presented by: PMT  
*in association with staff from*  
Caltrans  
BATA  
CTC



THE SAN FRANCISCO-OAKLAND  
**BAY BRIDGE**  
SEISMIC SAFETY PROJECT

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

- 
- Introduction
    - Mission, Goals, and Priorities
  - Strategic Direction
    - Objectives and Tactics
  - Summary and Next Steps



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Agenda



- TBSRP Goal
  - Complete the Toll Bridge Seismic Retrofit Program **before** September 2015, and for less than \$8.685 billion
- SFOBB Goal
  - Open East Span to traffic in both directions by October 2012
- Our Mission
  - Our Mission is to enhance the regional seismic safety and mobility of the traveling public through the accomplishment of the goals and objectives by expediting project/program delivery and ensuring efficient and effective use of public funds.



- 
- ☒ San Francisco-Oakland Bay Bridge East Span Seismic Replacement
  - ☐ San Francisco-Oakland Bay Bridge West Approach
  - ☐ New Benicia-Martinez Bridge
  - ☐ Dumbarton and Antioch Bridges Seismic Retrofit
  - ☐ Richmond-San Rafael
  - ☐ Environmental Monitoring
  - ☐ Gateway Park



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Strategic Plan Development

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## Decisions Aligned With Goals and Strategies

	IMPROVE MOBILITY/ SEISMIC SAFETY	COST AND/OR RISK REDUCTION	SCHEDULE ACCELERATION
<b>SAS</b> <ul style="list-style-type: none"> <li>Addendum approvals</li> </ul>	✓	✓	
<b>YBI</b> <ul style="list-style-type: none"> <li>Advance YBI Transition Structures</li> </ul>	✓	✓	✓
<b>SKYWAY</b> <ul style="list-style-type: none"> <li>Schedule and cost mitigation</li> <li>CCO approvals</li> </ul>	✓	✓	
<b>OTD</b> <ul style="list-style-type: none"> <li>Contract split</li> <li>Submarine cable PS&amp;E</li> <li>Submarine cable 2-contract option</li> </ul>	✓	✓	✓
<b>WEST APPROACH</b> <ul style="list-style-type: none"> <li>Expedited demolition over Labor Day weekend</li> <li>Realignment - ST6D</li> </ul>	✓	✓	✓



## ■ Priorities



- To identify opportunities to accelerate east span traffic opening dates
- To continue implementing an integrated approach in identifying and responding to risks (scope, schedule, budget, and quality)
- To identify savings and deliver the overall capital support expenses below the current budget
- To support and be responsive to the technical teams
- To maintain and promote a positive public image of the East Span Project
- To quickly and accurately identify, analyze and respond to TBPOC requests and direction



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Priorities





## ■ 2007 Major Milestones

- West Approach Demolition/Temp. Bypass EB, Spring
- Oakland Touchdown #1 Award, Summer
- Tower and Deck Fabrication, Fall
- YBI Viaduct Replacement, Fall
- Skyway Completion, Winter
- SAS Marine Foundation Completion, Winter

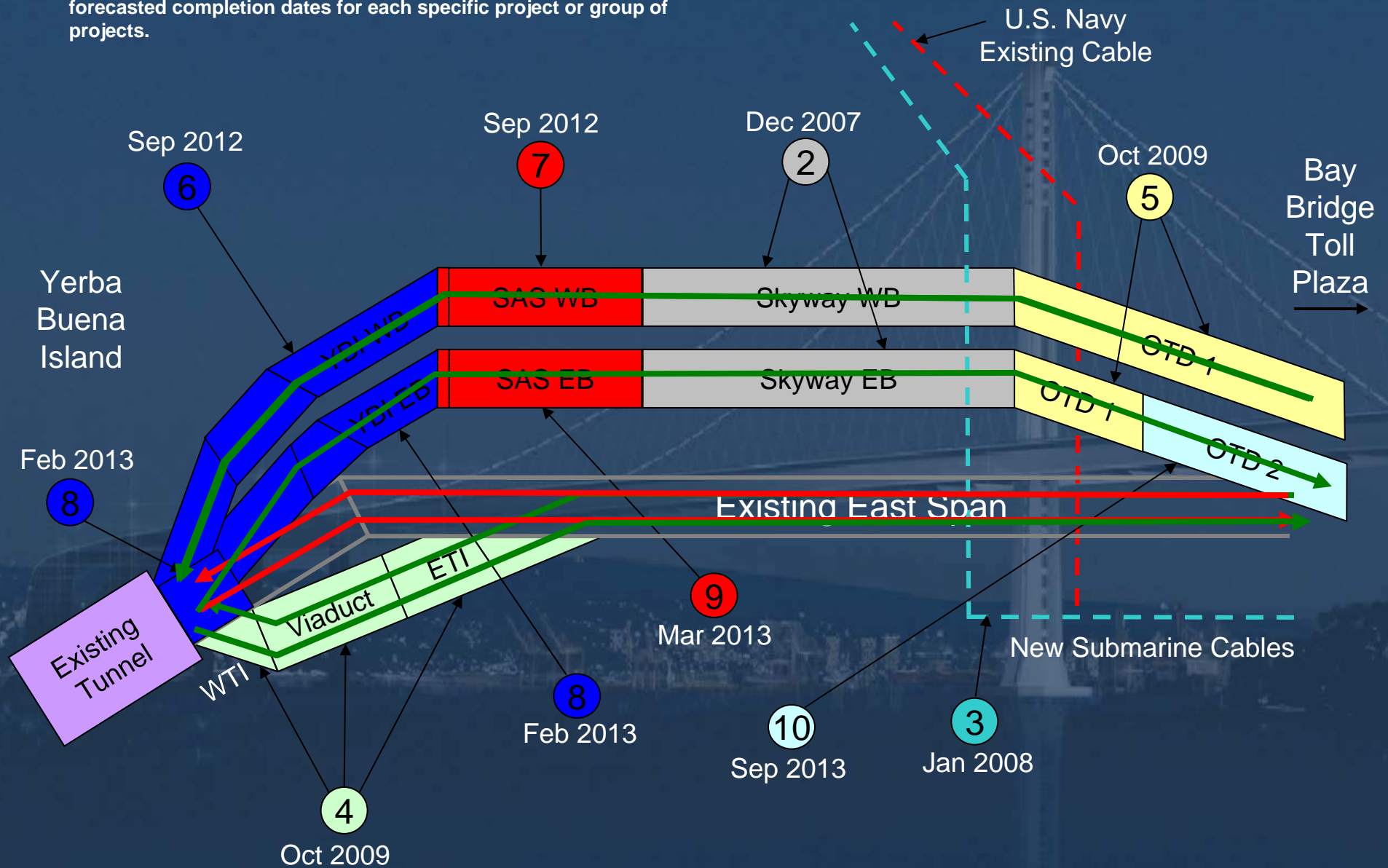


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2007 Major Milestones

Note: These dates are relative to the availability of each segment for the placement of traffic. They do not necessarily correspond to the forecasted completion dates for each specific project or group of projects.



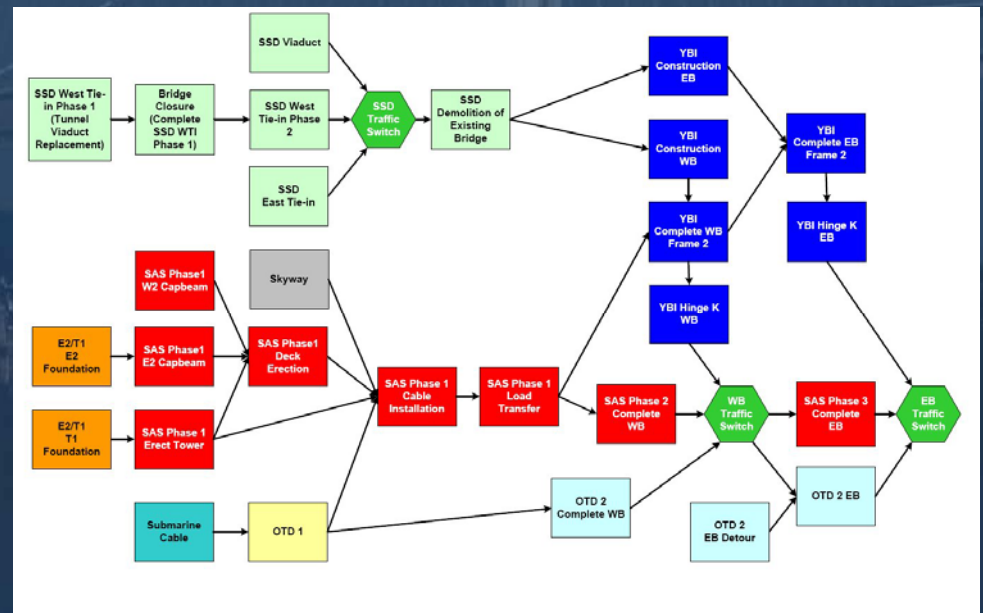
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Building the East Span – 4<sup>th</sup> Quarter



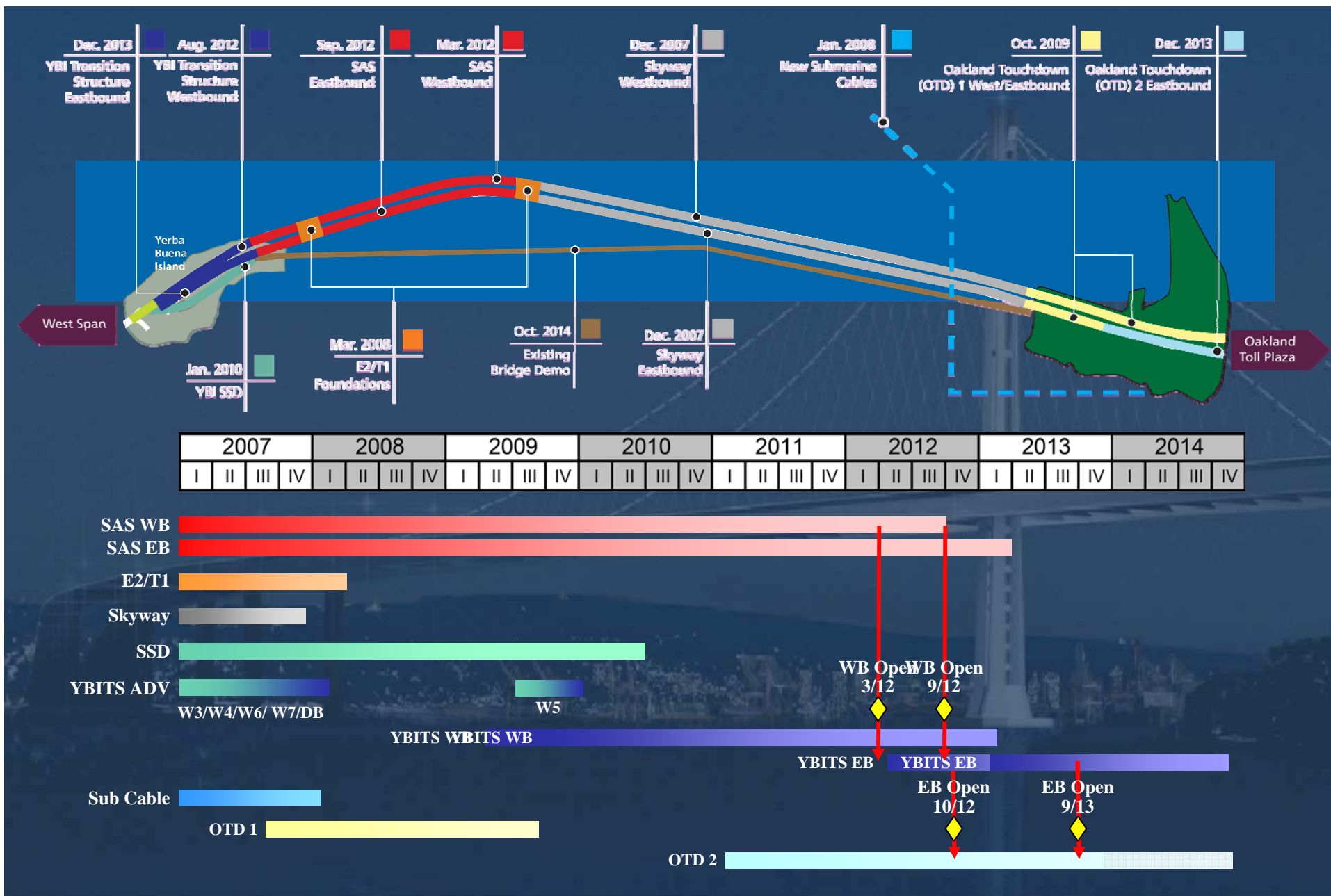
- Objective 1: Identify work that can be taken off the critical path for SAS, YBI, OTD
  - Tactic: Corridor Schedule Team and Risk Management Team
  - Output: Corridor Schedule Risk Analysis, Interdependencies Flowchart, **Opportunity Schedule**



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Strategy to Meet October 2012 Goal



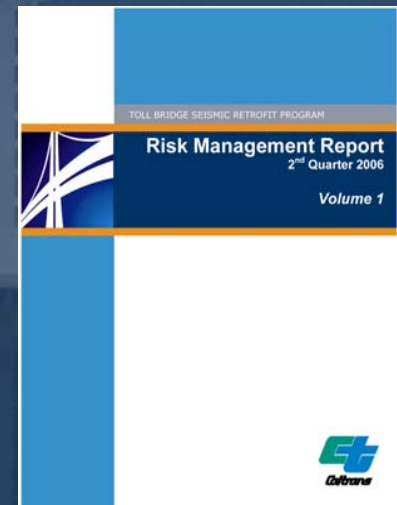
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## 4<sup>th</sup> Quarter/Opportunity Schedule Comparison

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- Objective 2: Focus on reducing risks of potential delay
  - Tactic: Corridor Schedule Team and Risk Management Team aggressively identify, assess, and develop options to mitigate risks
  - Output: Quarterly Risk Management Report, Corridor Schedule Risk Analysis, Risk Management Implementation Plan, Operational Plan

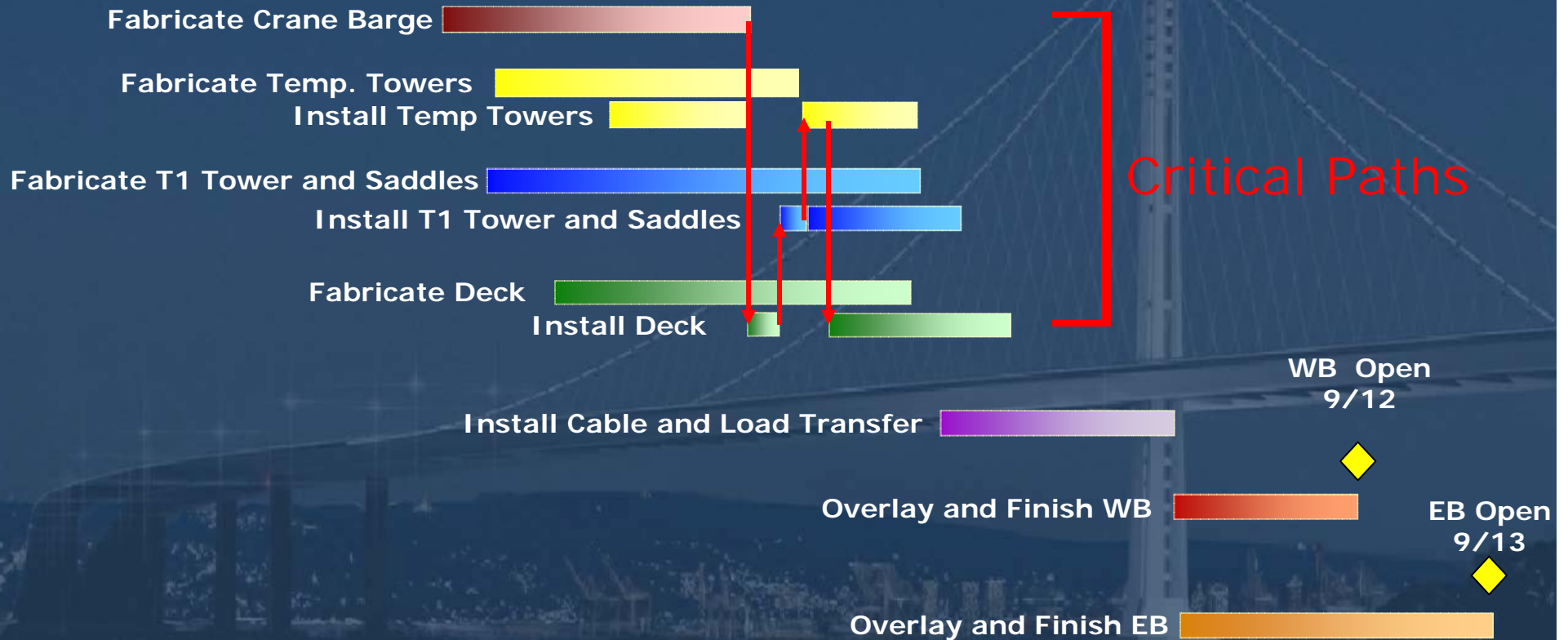


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Strategy to Meet October 2012 Goal

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2007				2008				2009				2010				2011				2012				2013			
I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV



Schedule based on ABF  
Baseline Schedule  
Submittal (under review),  
February 2, 2007

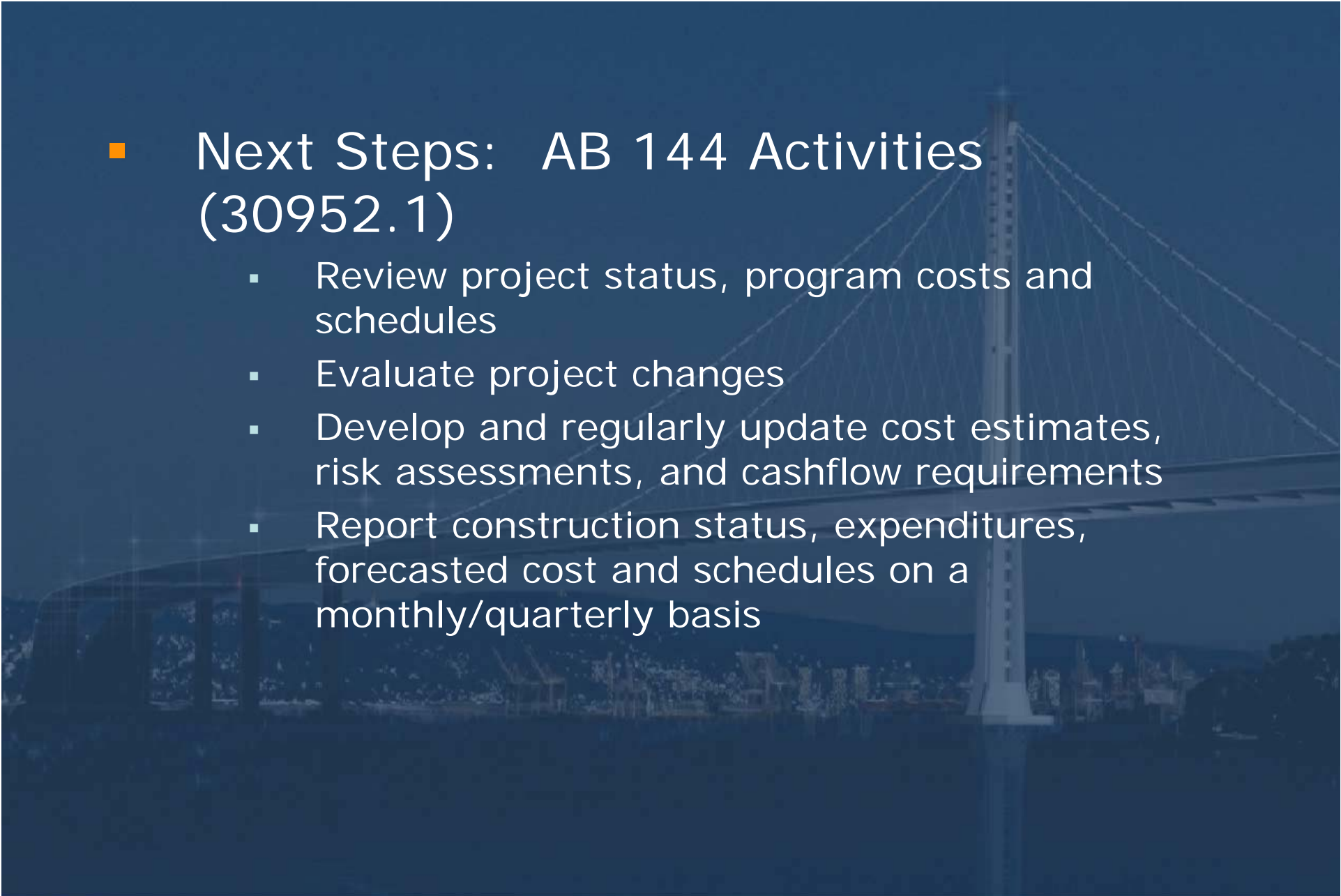


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SAS Major Milestones



- 
- Next Steps: AB 144 Activities (30952.1)
    - Review project status, program costs and schedules
    - Evaluate project changes
    - Develop and regularly update cost estimates, risk assessments, and cashflow requirements
    - Report construction status, expenditures, forecasted cost and schedules on a monthly/quarterly basis



- Fulfill Goals Through Integrated Teams Focused On:

- Accelerating east span traffic opening dates
- Monitoring project and program actions through PMT reporting (Quarterly/Monthly) formats:
  - Reduce time necessary to construct SAS
  - Identify efficiencies in delivery of Yerba Buena Island Transition Structure and the Oakland Touchdown
  - Identify savings and deliver the overall capitol support expenses below the current budget

	IMPROVE MOBILITY/ SEISMIC SAFETY	REDUCE COST & RISK	ACCELERATE SCHEDULE
<b>SWAT Teams</b> <ul style="list-style-type: none"> <li>▪ Monitor and report on key milestones, identified risks</li> </ul>	in development		
<b>RISK MANAGEMENT TEAM</b> <ul style="list-style-type: none"> <li>▪ Jon Tapping</li> </ul>	✓	✓	✓
<b>COMMUNICATIONS TEAM</b> <ul style="list-style-type: none"> <li>▪ Bart Ney</li> </ul>	✓	✓	✓
<b>CORRIDOR SCHEDULE TEAM</b> <ul style="list-style-type: none"> <li>▪ Jon Tapping</li> </ul>	✓	✓	✓







# Questions and Answers



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SEISMIC SAFETY PROJECT

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Q & A



## Back-up/Overview Slides



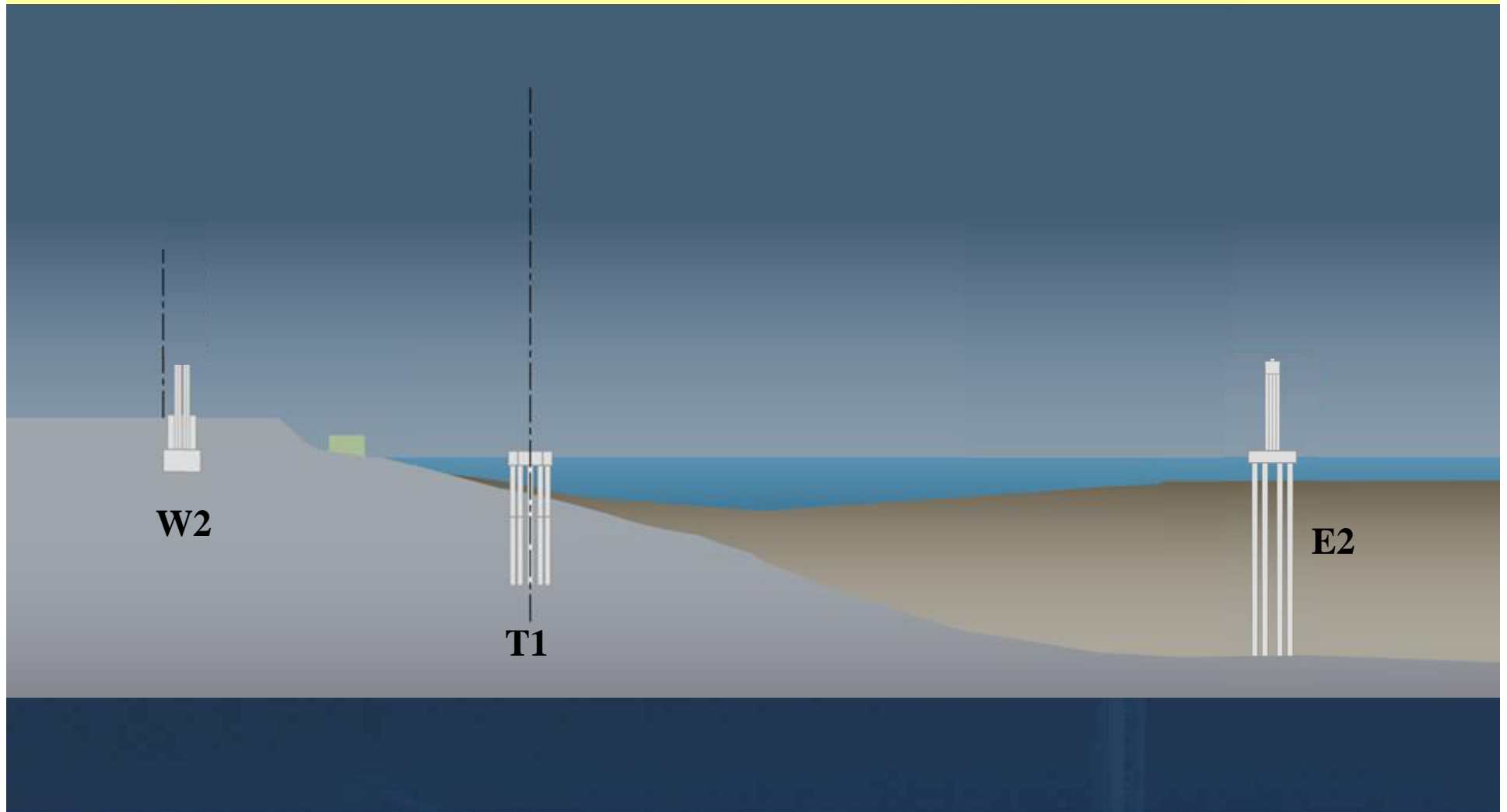
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Summary



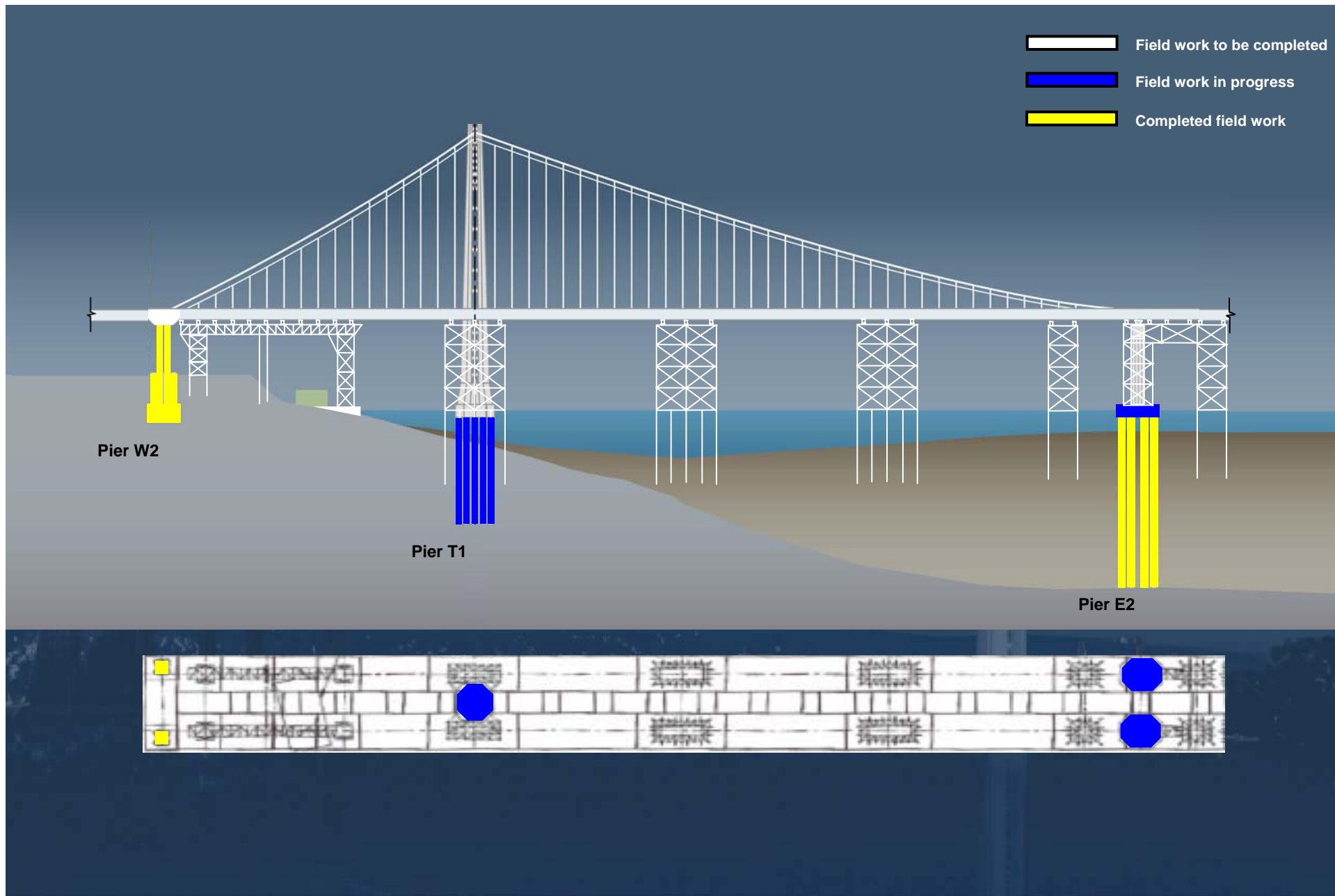
# STEP 1



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SAS – Overview, Construction Sequences

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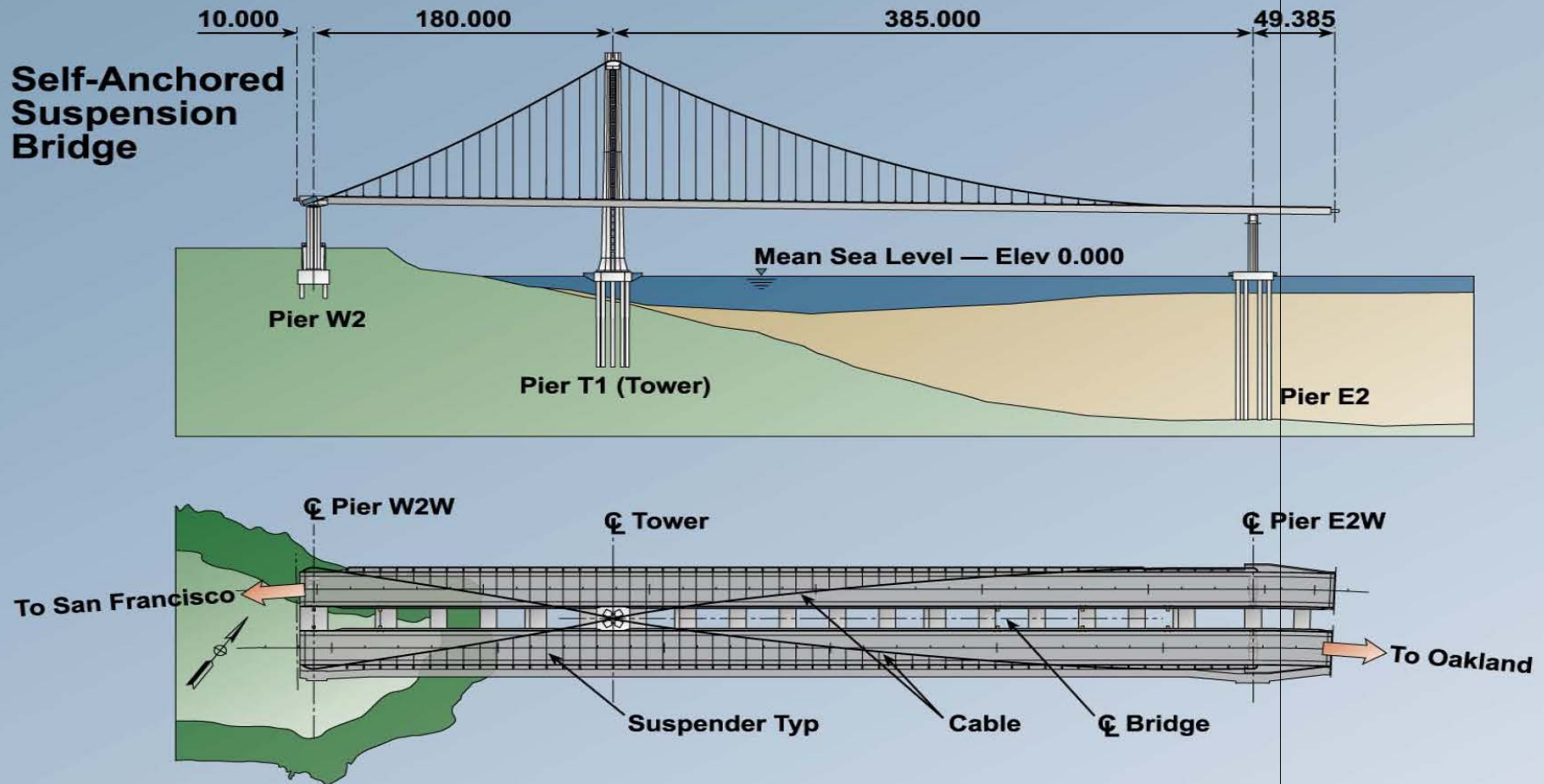
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SAS - Construction Progress



# BRIDGE DIAGRAM

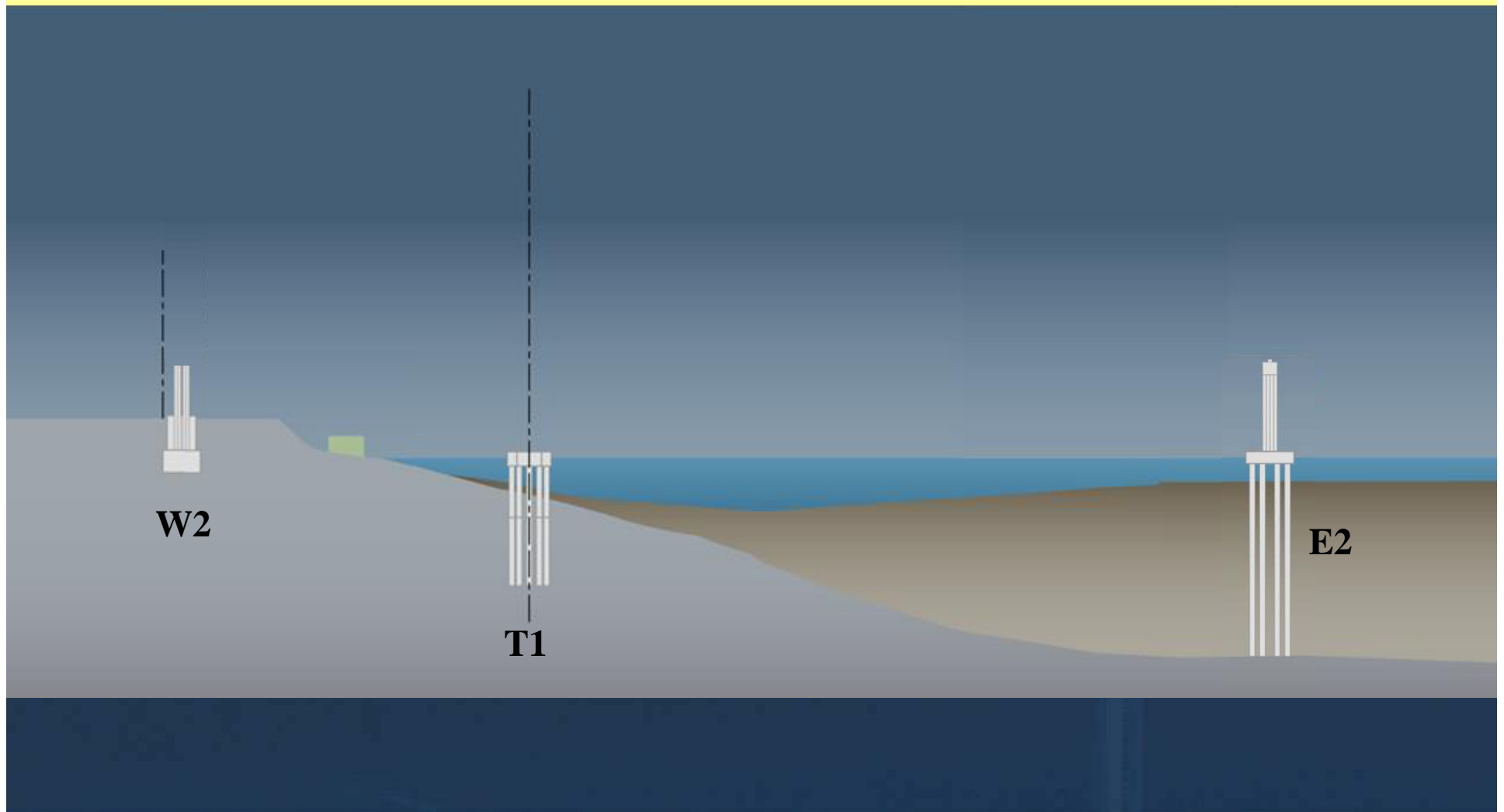


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SAS - Overview

# STEP 1



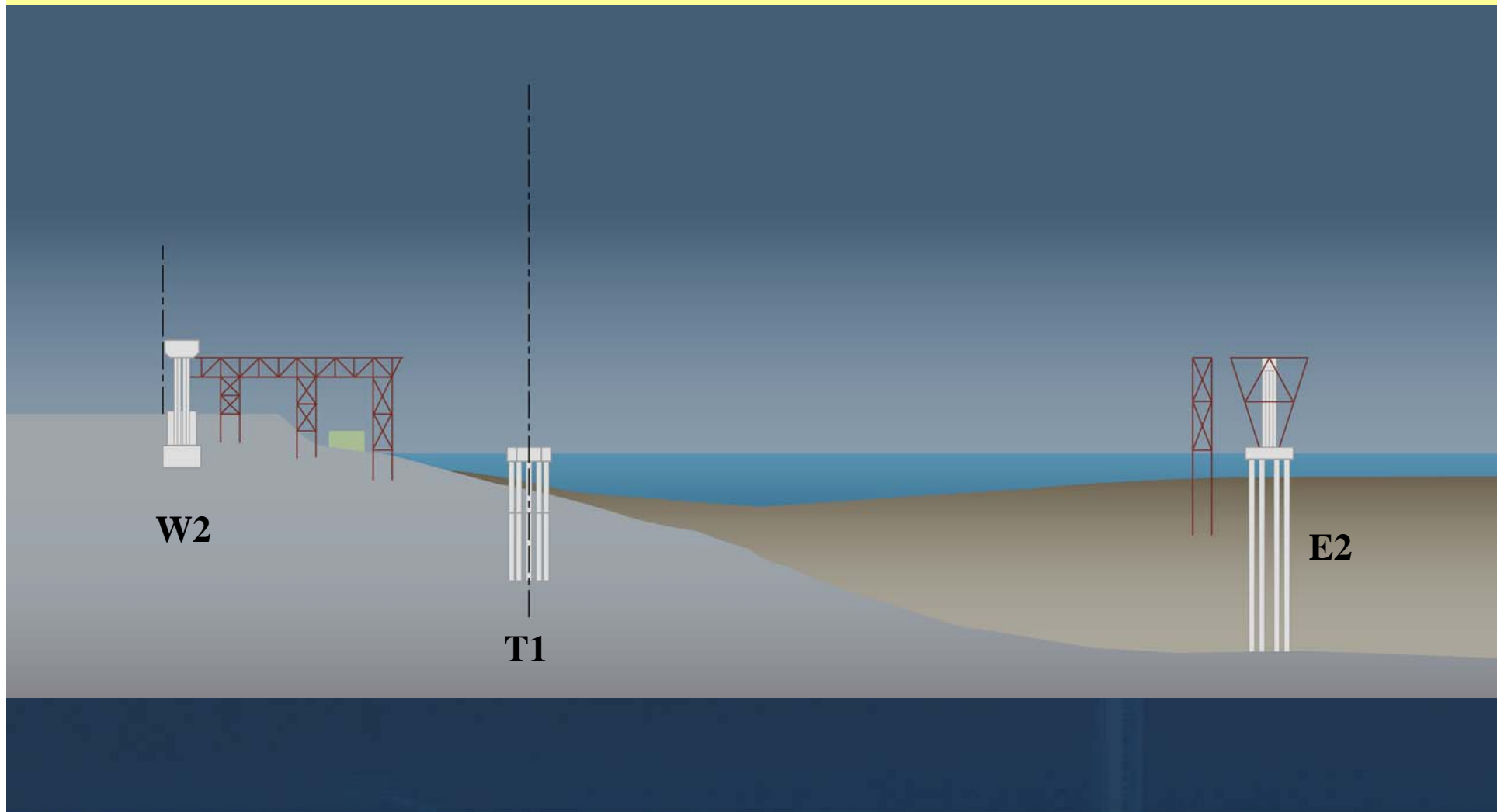
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SAS – Overview, Construction Sequences

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# STEPS 3 AND 4

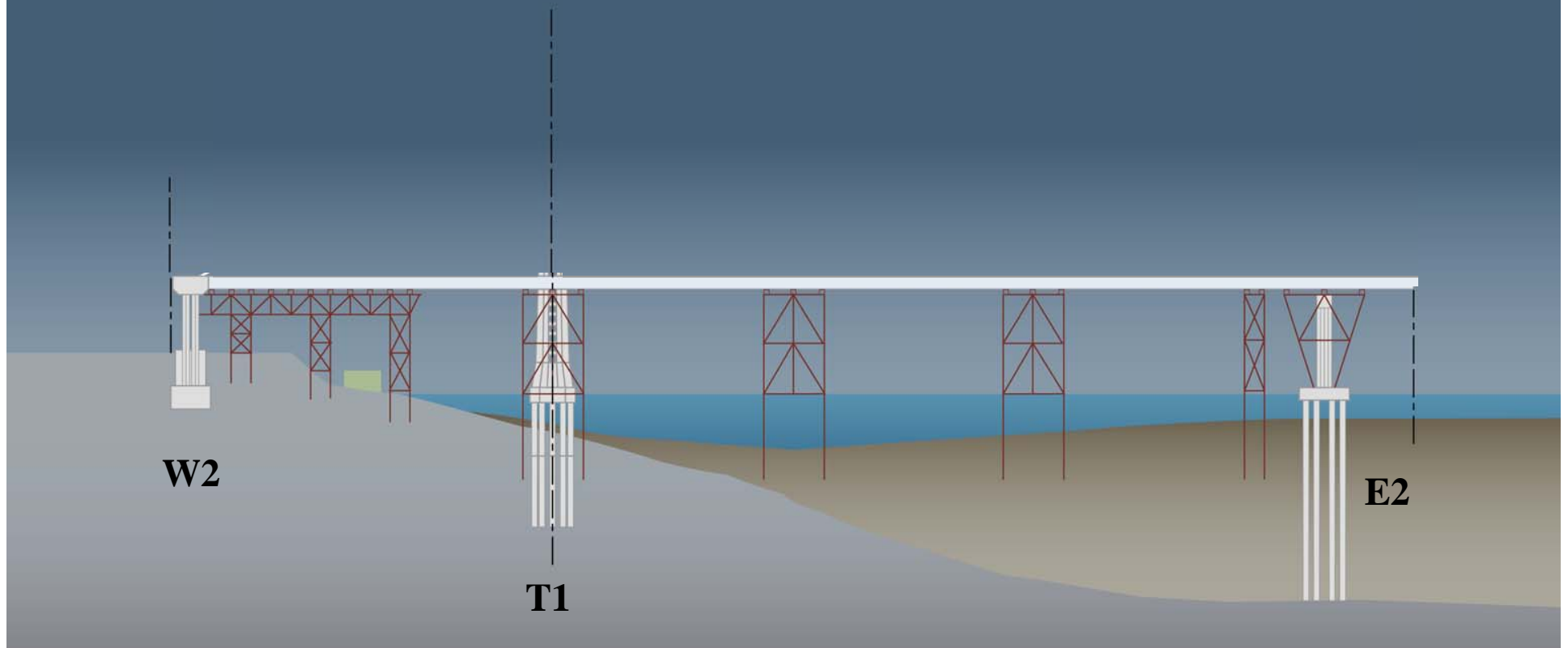


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SAS – Overview, Construction Sequences

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# STEPS 5 AND 6



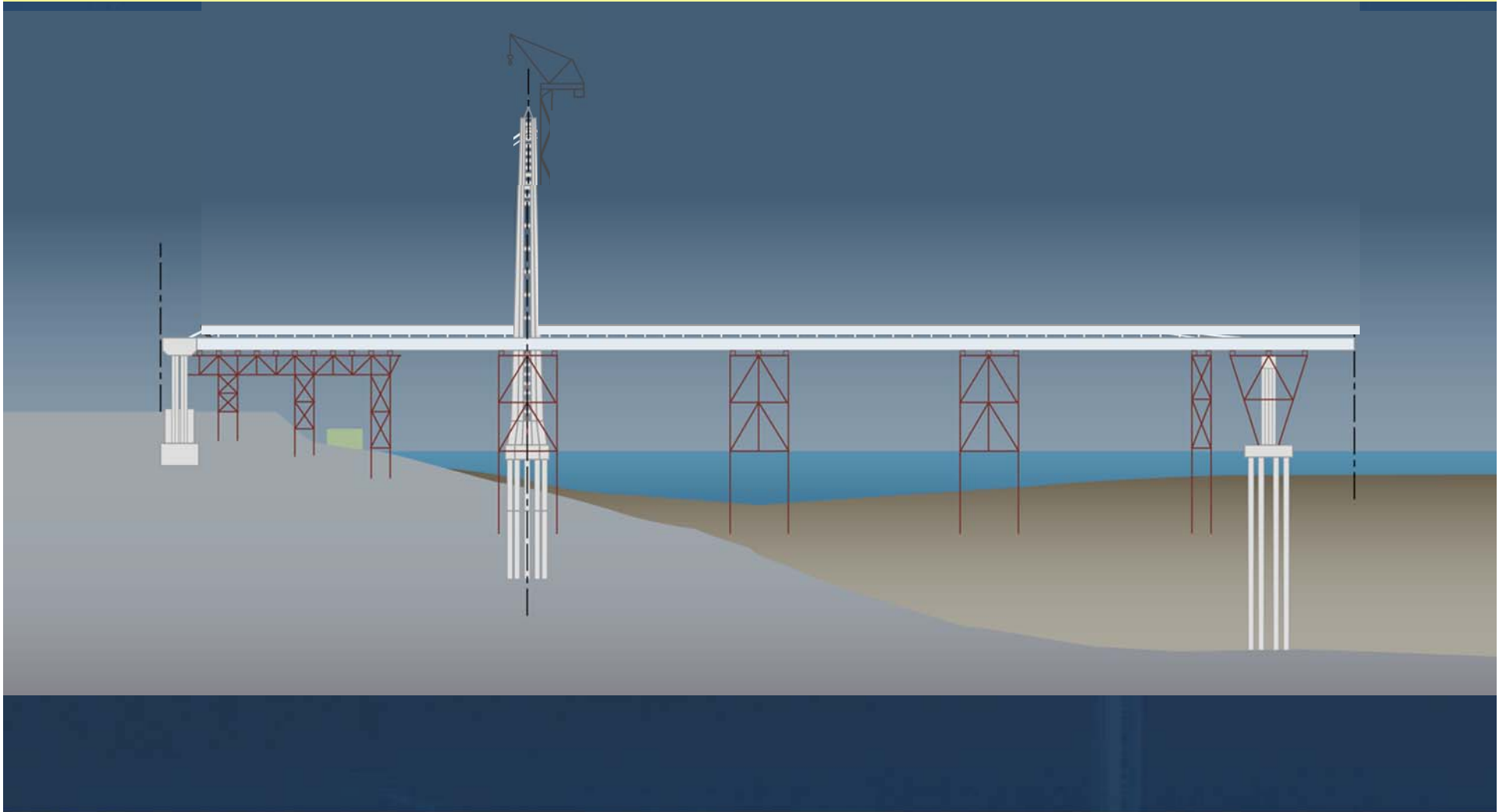
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SAS – Overview, Construction Sequences

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# STEPS 7 AND 8



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SAS – Overview, Construction Sequences

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## STEPS 9 AND 10



THE SAN FRANCISCO-OAKLAND  
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SEISMIC SAFETY PROJECT

# SAS – Overview, Construction Sequences



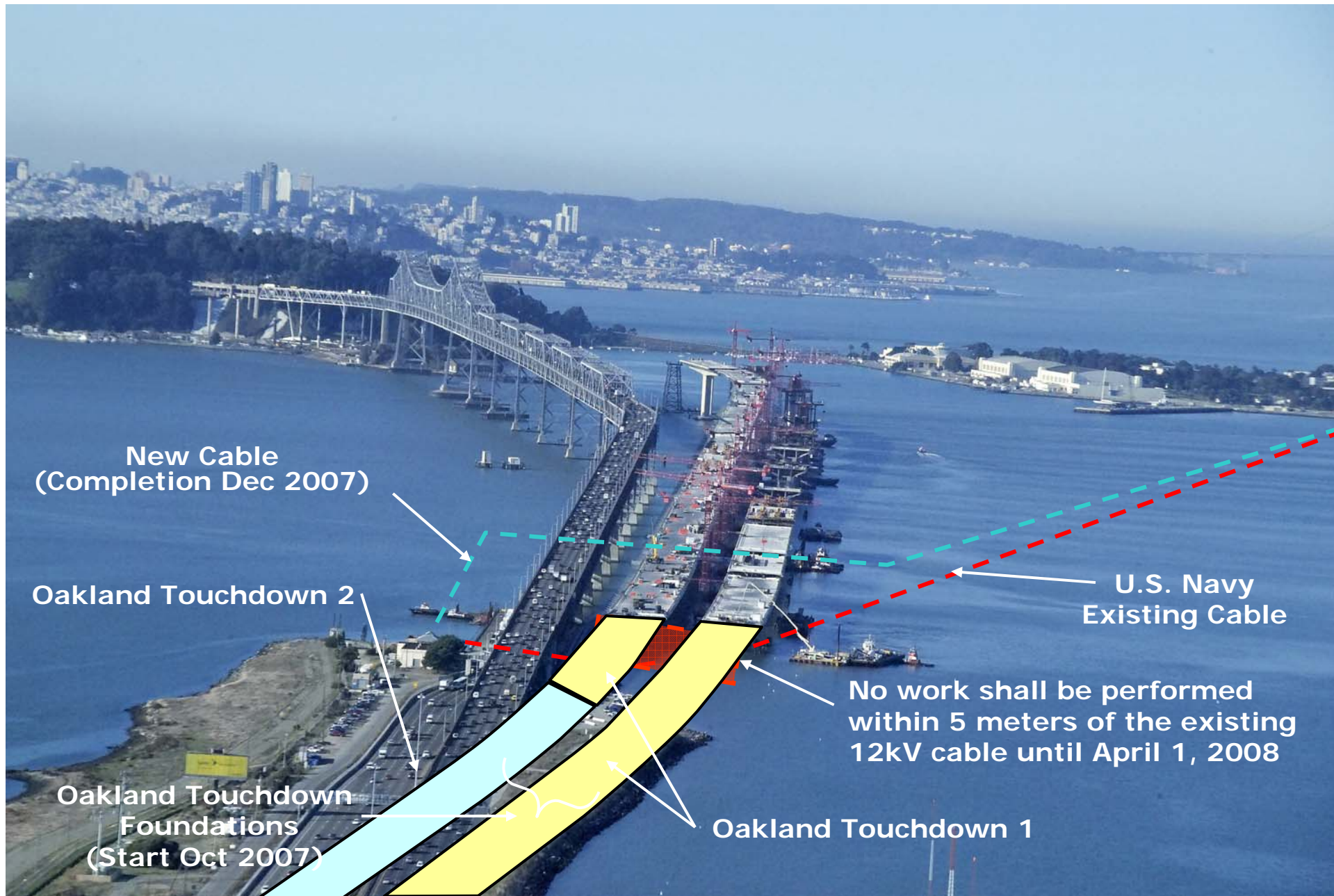
# STEPS 11 THRU 13



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SEISMIC SAFETY PROJECT

SAS – Overview, Construction Sequences

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New Cable  
(Completion Dec 2007)

Oakland Touchdown 2

Oakland Touchdown  
Foundations  
(Start Oct 2007)

U.S. Navy  
Existing Cable

No work shall be performed  
within 5 meters of the existing  
12kV cable until April 1, 2008

Oakland Touchdown 1



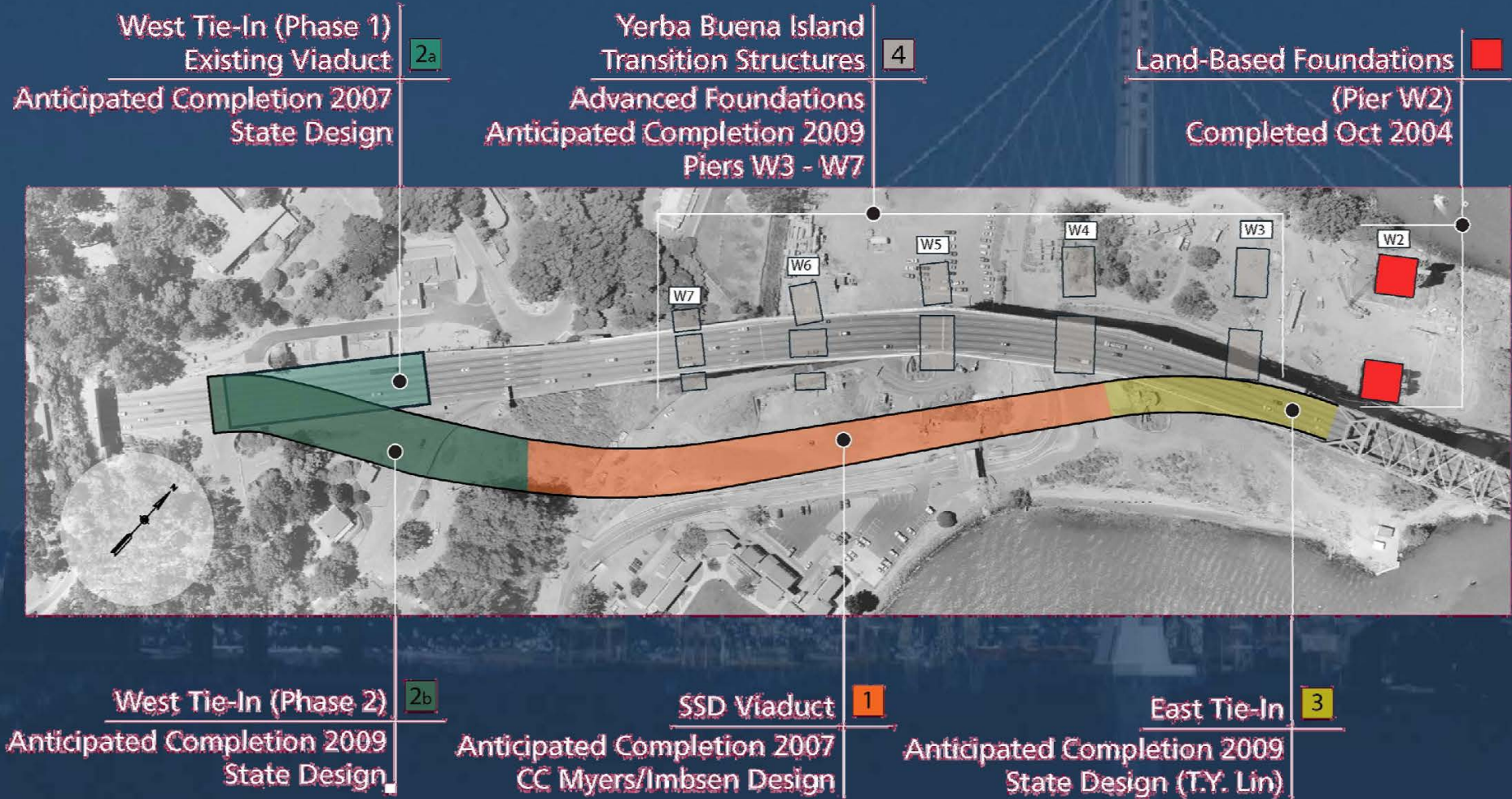
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SEISMIC SAFETY PROJECT

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OTD - Overview



# South South Detour

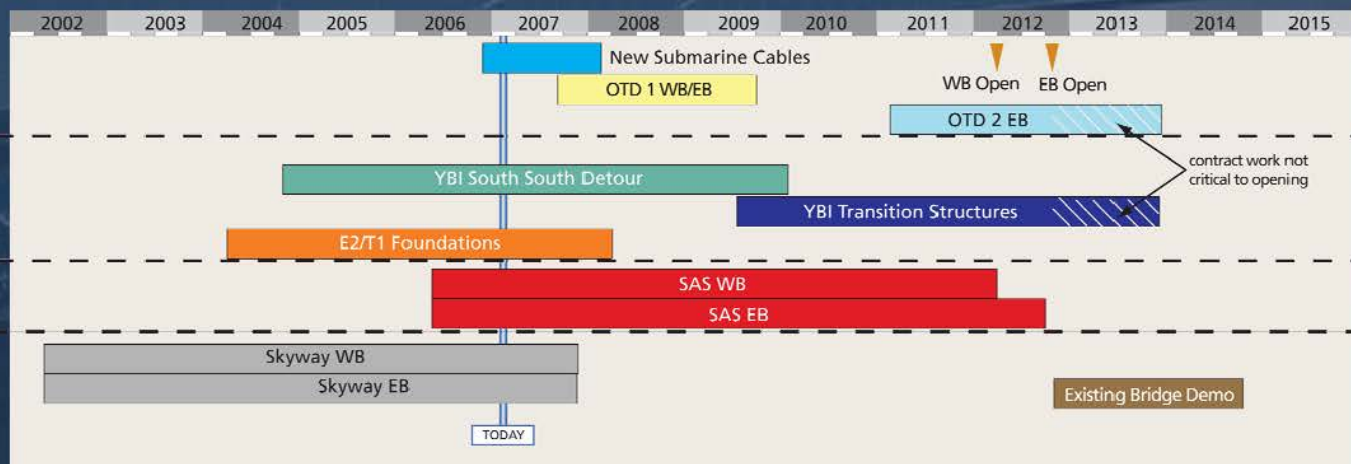
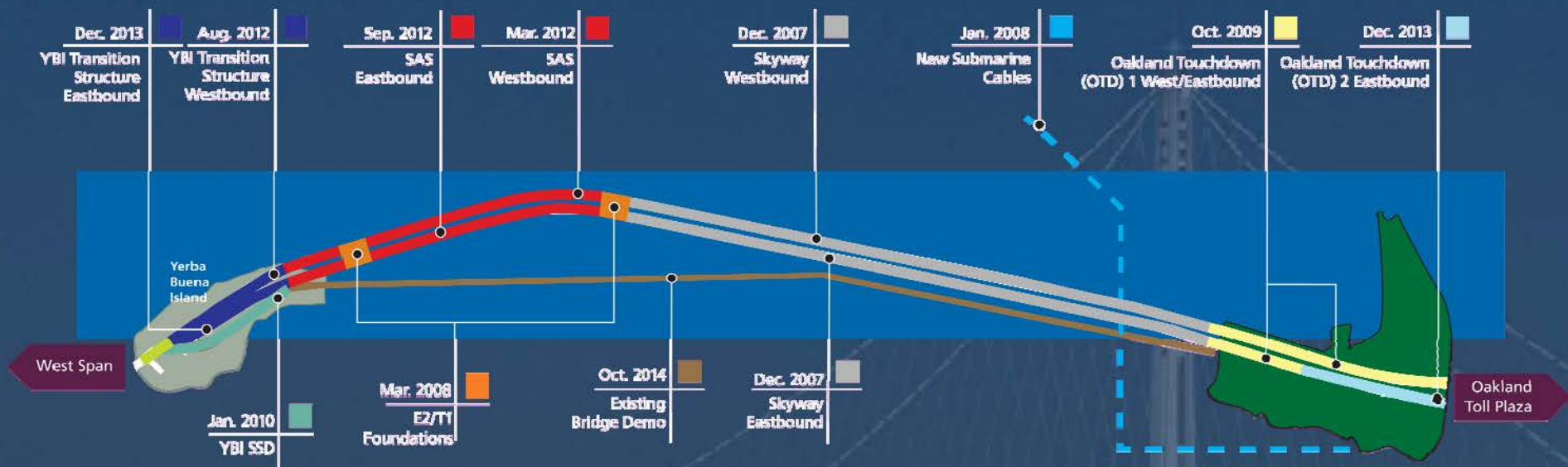


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Construction Sequence and YBITS Advanced Foundations

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SEISMIC SAFETY PROJECT

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Opportunity Schedule

**TO:** Toll Bridge Program Oversight Committee      **DATE:** February 12, 2007  
(TBPOC)

**FR:** Bart Ney, Caltrans Bay Bridge Public Information Officer

**RE:** Agenda No. - 4c  
Program Issues  
Item- 2007 Legislative Update Preparations

---

**RECOMMENDATION:**

Information item only

**COST:**

N/A

**SCHEDULE IMPACTS:**

N/A

**DISCUSSION:**

The 2007 Legislative Update is scheduled for 3:00 p.m. on Thursday, February 15, 2007.

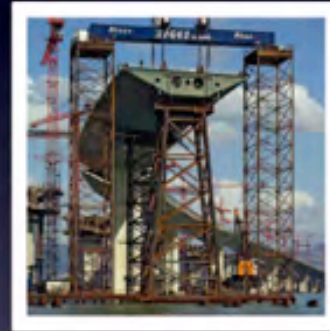
Attached for your use are the following documents:

- 2007 Legislative Update Pre-Final PowerPoint Presentation sent electronically on Monday, February 12.
- 2007 Legislative Update Final Report sent electronically on Friday, February 9.

Final bound documents will be presented and made available at the TBPOC meeting.

**Attachment(s):**

- 1) 2007 Legislative Update Pre-Final PowerPoint
- 2) 2007 Legislative Update Final Report



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OVERSIGHT COMMITTEE

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# Will Kempton

Chairman

Toll Bridge Program Oversight Committee



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OVERSIGHT COMMITTEE

2007 Legislative Update

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# Opening Comments



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OVERSIGHT COMMITTEE

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CALIFORNIA TRANSPORTATION COMMISSION

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## Toll Bridge Seismic Retrofit Program Report



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Fourth Quarter Report  
December 31, 2006

# 2006 4th Quarter Report



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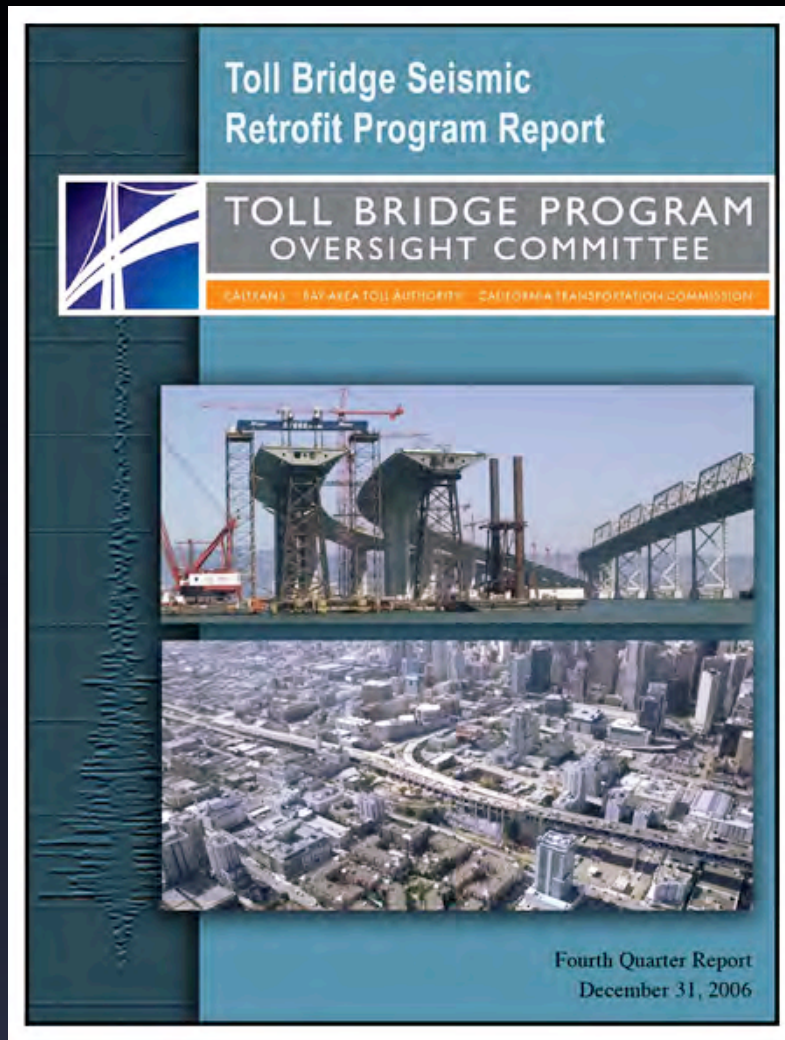
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# Costs and Schedule

Toll Bridge Program Oversight Committee (TBPOC) has been managing the Toll Bridge Seismic Retrofit Program for over a year

Program is on schedule to deliver seismic safety on remaining projects by 2013



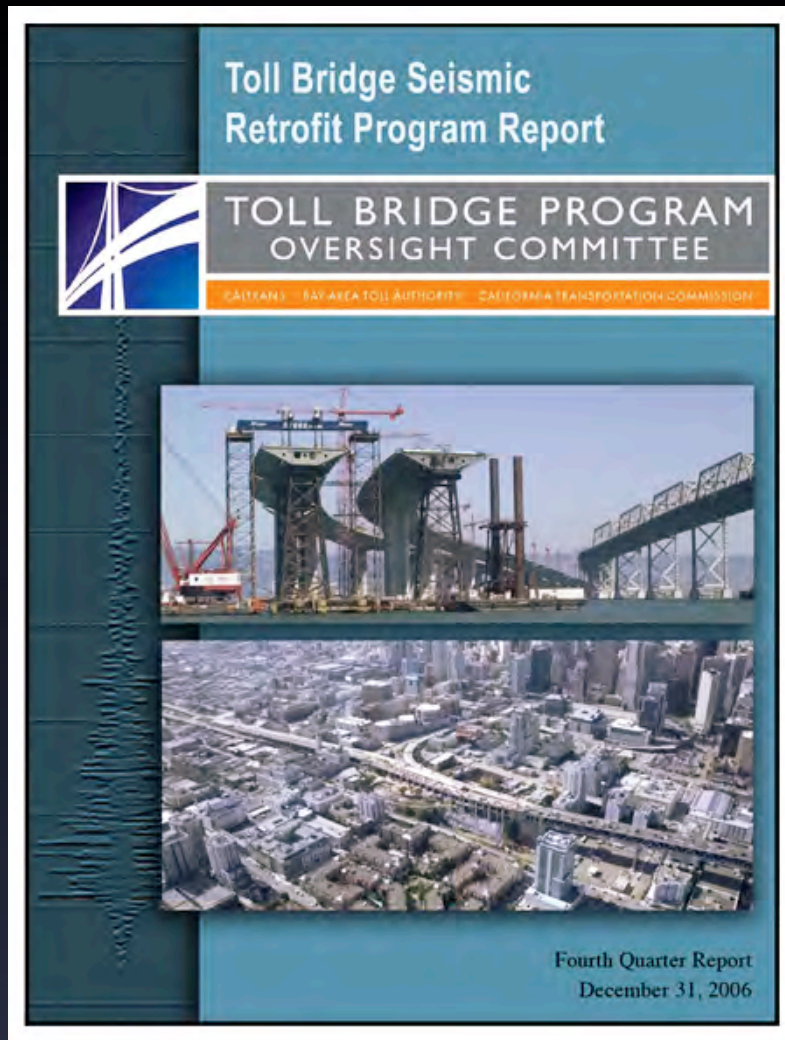
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# Costs and Schedule

AB 144/SB 66 budgets  
being effectively managed  
by the TBPOC

Robust contingency fund  
created and available



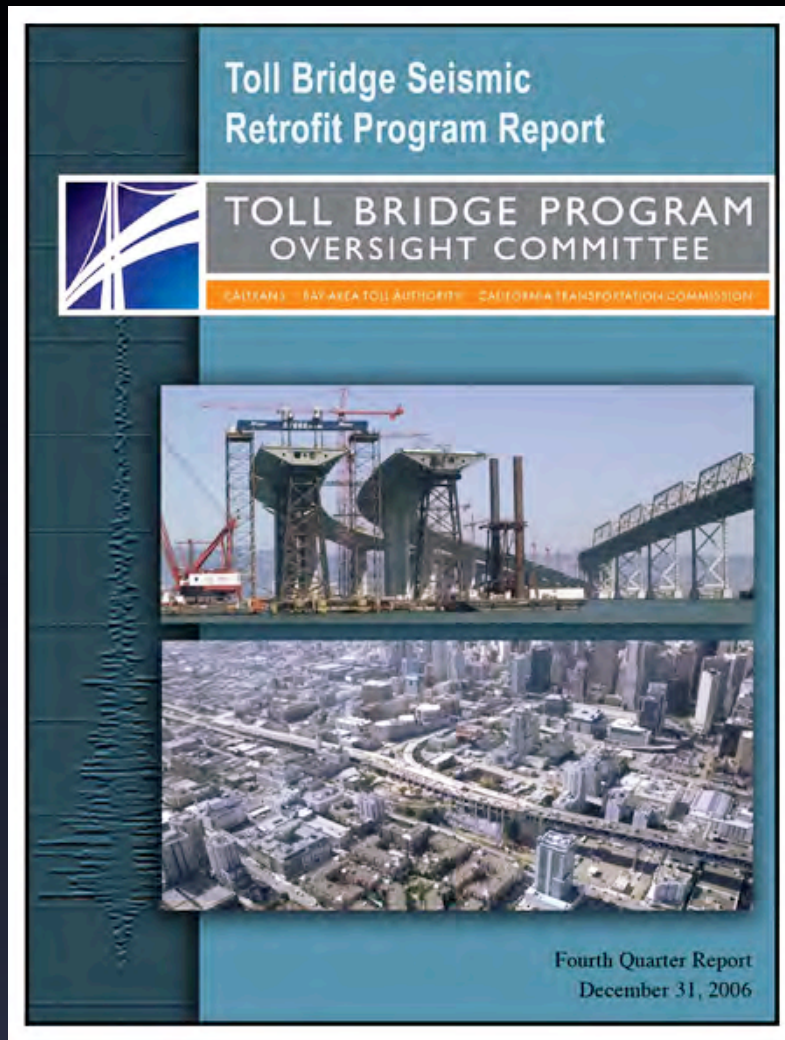
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# Costs and Schedule

Bay Bridge East Span  
Target Opening Dates:

Sept. 2012 Westbound  
Sept. 2013 Eastbound

Bay Bridge West Approach  
scheduled for completion in  
2009



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CALIFORNIA TRANSPORTATION COMMISSION

2006 4th Quarter Report



## Toll Bridge Seismic Retrofit Program Report



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Fourth Quarter Report  
December 31, 2006

# Costs and Schedule

New Benicia/Martinez  
Bridge scheduled to open in  
2007.

All other seismic retrofit  
work legislated in AB 144 is  
completed.



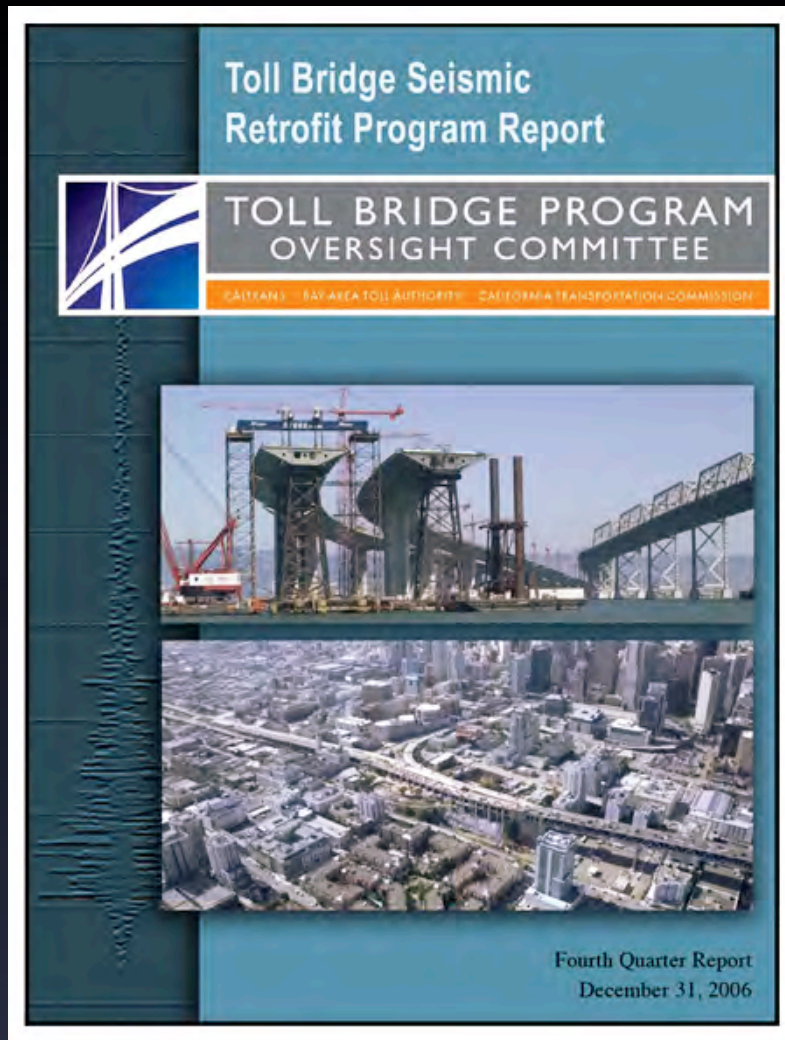
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## 2006 4th Quarter Report



## Seismic safety work completed on:

San Mateo/Hayward Bridge  
Richmond/San Rafael Bridge  
Carquinez Bridge  
New Benicia/Martinez Bridge  
SFOBB West Span Bridge  
Vincent Thomas Bridge  
San Diego Coronado Bridge



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CALIFORNIA TRANSPORTATION COMMISSION

2006 4th Quarter Report



# Challenges, Risks &



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# Challenges, Risks & Opportunities

TBPOC oversees innovative Risk Management strategies that identify, monitor and respond to risks

TBPOC continues to explore opportunities to accelerate project schedules





## Risk Management Successes:

- Receipt of multiple bids on SAS project
- Integrated project schedules
- Creation of innovative nationally recognized Risk Management strategies



# Upcoming Challenges & Opportunities

- SAS tower and deck fabrication
- West Approach Demolition
- Benicia Bridge Opening





# Program Scope and History

Bart Ney

Public Information Officer

San Francisco-Oakland Bay Bridge



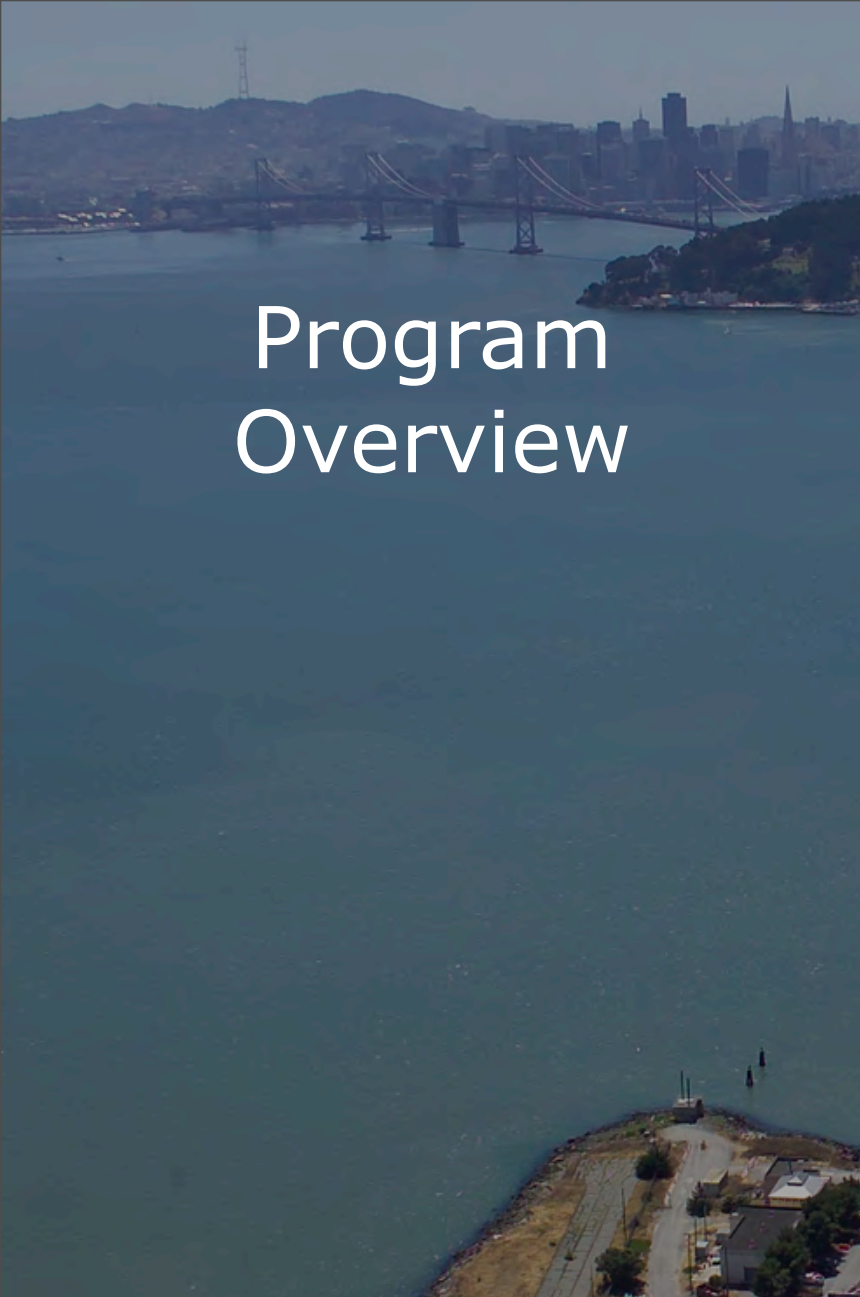
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OVERSIGHT COMMITTEE

2007 Legislative Update

CALTRANS

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# Program Overview



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OVERSIGHT COMMITTEE

2007 Legislative Update

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CALIFORNIA TRANSPORTATION COMMISSION



West Approach

West Span

Yerba Buena Island  
Transition

Self Anchored  
Suspension Span

Skyway

Oakland Touchdown



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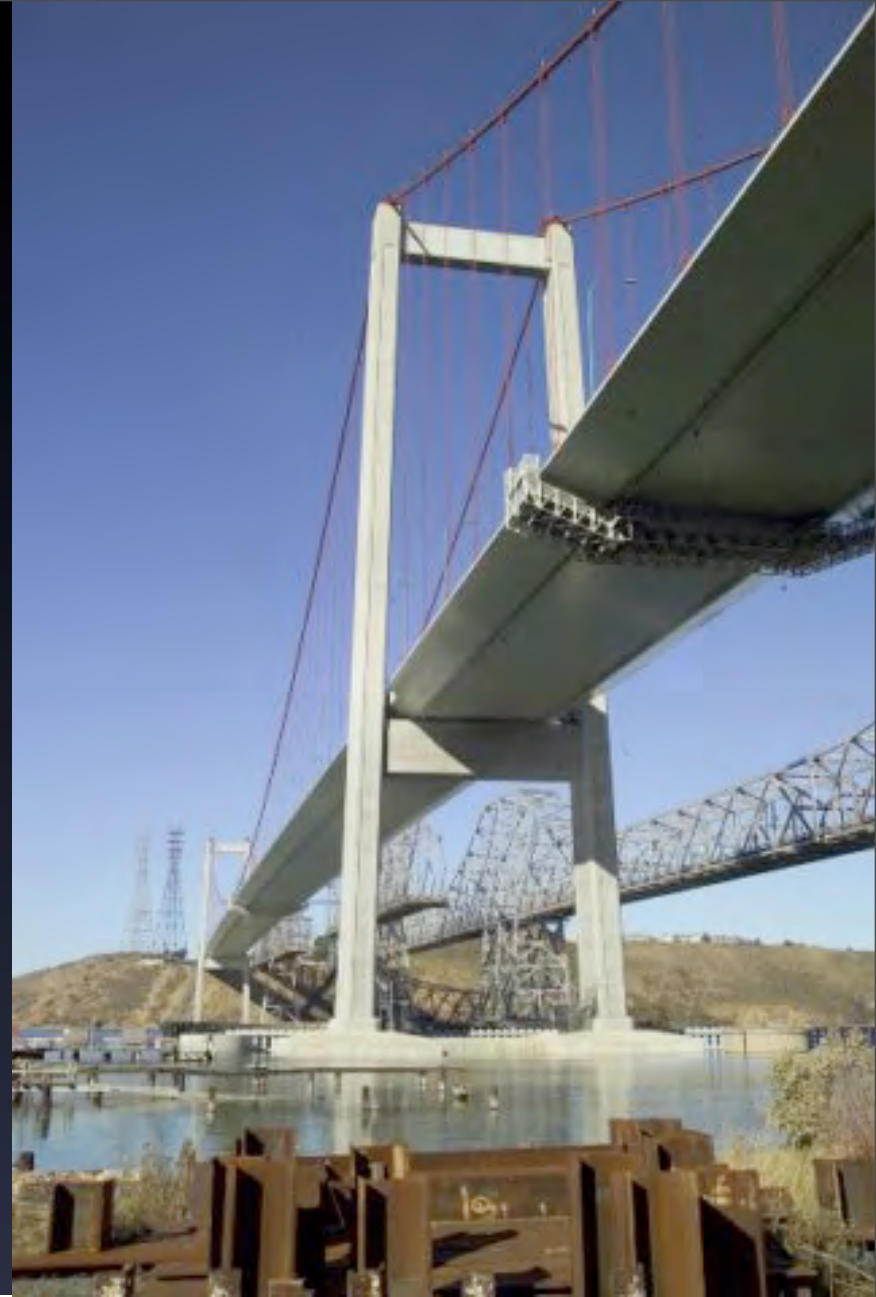
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Program Overview



# Carquinez Bridge



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Program Scope and History

# Richmond/San Rafael Bridge



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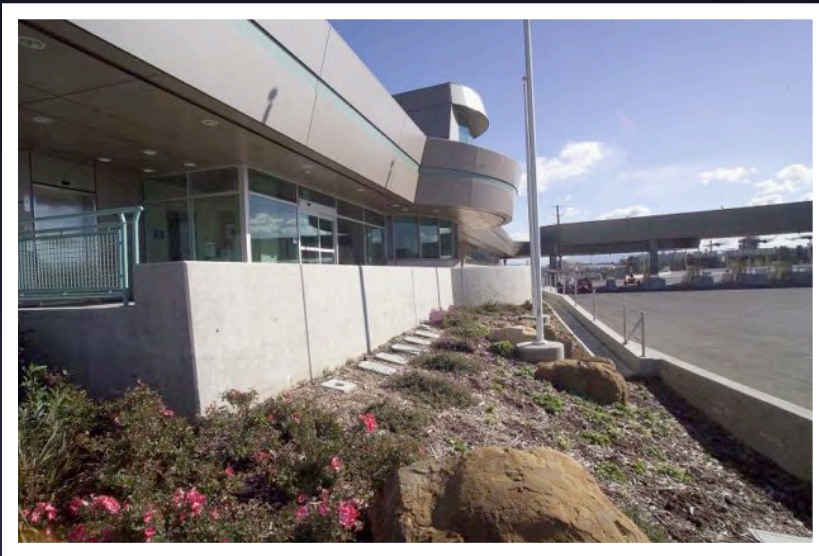
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## Program Scope and History



# New Benicia/Martinez Bridge



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## Program Scope and History





# San Francisco- Oakland Bay Bridge Highlights



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# Self Anchored Suspension Span Bid Awarded



## NEWS RELEASE

For Immediate Release:

Contact: But Ney, Caltrans 916 224 6499  
Randy Rentschler, BATA 916 317 1780  
Stephen Mallon, CTC 916 654 4245

*Toll Bridge Program Oversight Committee Works With Construction Industry:*

### New Bay Bridge SAS Bids Opened

**Sacramento, Calif., March 22, 2006** – The Toll Bridge Program Oversight Committee (TBPOC) consisting of Caltrans, the Bay Area Toll Authority and the California Transportation Commission opened bids today for the Self Anchored Suspension (SAS) Bridge contract for the new Bay Bridge.

The apparent low bidder is American Bridge/Fluor Enterprises a Joint Venture who presented a bid for \$1.43 Billion. There were a total of 2 bids submitted, including a \$1.68 Billion bid by Kiewit/Koch Skanska/Manson a Joint Venture.

Caltrans Director Will Kempton said, "This is great news for the Bay Area and the State of California. We can now move to get a safe bridge in place as quickly as possible."

Since the contract was advertised in August 2005, the TBPOC has worked closely with the construction industry to identify and implement key contract enhancements to the SAS in order to improve competitive bidding. Amendments included extending the bid advertisement period, extending the contract by one year, and enhancing incentives for contractor cost reduction. Three contractor outreach meetings were held, culminating in over 340 bidder inquiries.

The Caltrans engineer's estimate for the SAS is \$1.45 billion. The TBPOC has made efforts to reduce costs on the SAS contract, although construction and market factors influence the cost. Rising bonding and insurance costs, increased labor prices, and worldwide demand for construction equipment are factors. Shipping costs and the construction labor force have also been significantly impacted by Hurricane Katrina and Rita.

"Today is a great day for our region. We're one step closer to seismic safety and a brand new bridge," said Steve Heminger, BATA Executive Director.

The review process will begin immediately, assessing the bids for responsiveness. The contract award is anticipated to occur in late April. The SAS is expected to be open to vehicle traffic in late 2013. Contractor incentives can potentially shorten the overall project construction up to six months.

"It is an historic day for transportation in California," commented John Bana, Executive Director for the California Transportation Commission.

Page 1 of 2



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# Transition Span Lifts



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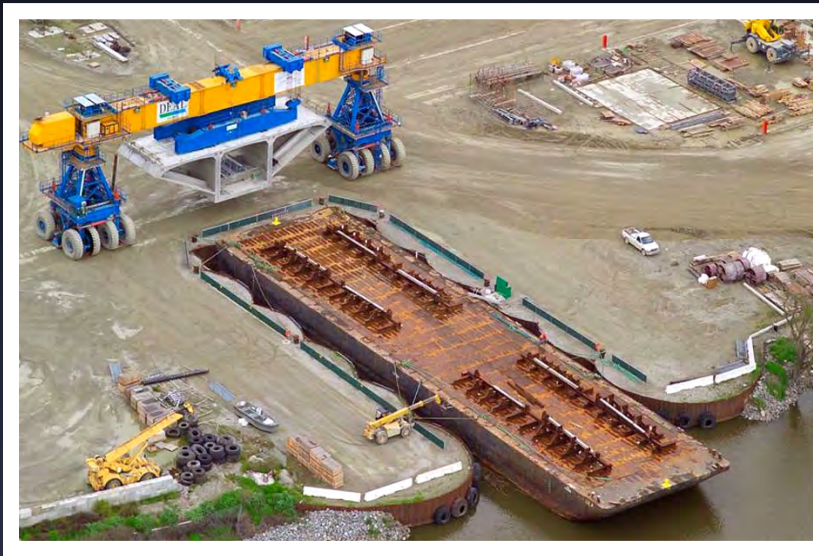
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# Stockton Yard Operations Completed



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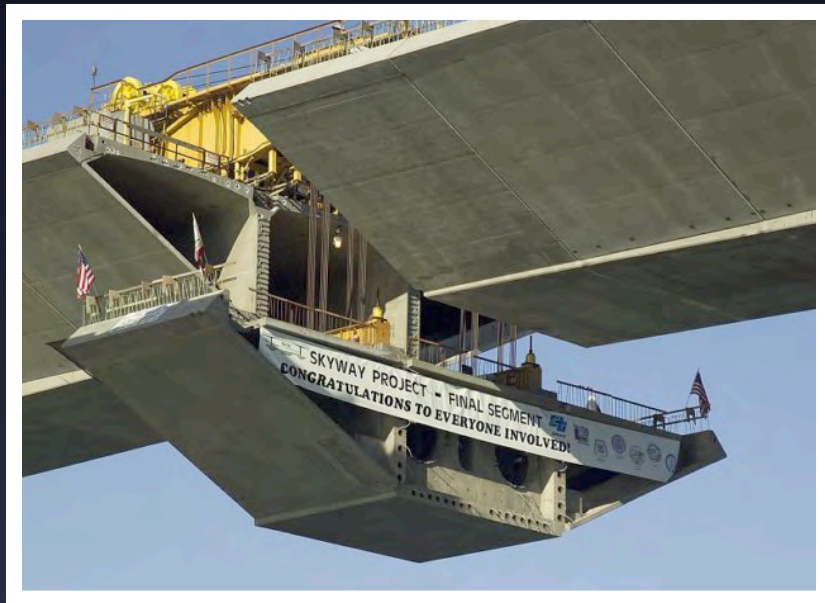
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# Final Skyway Segment Lifts



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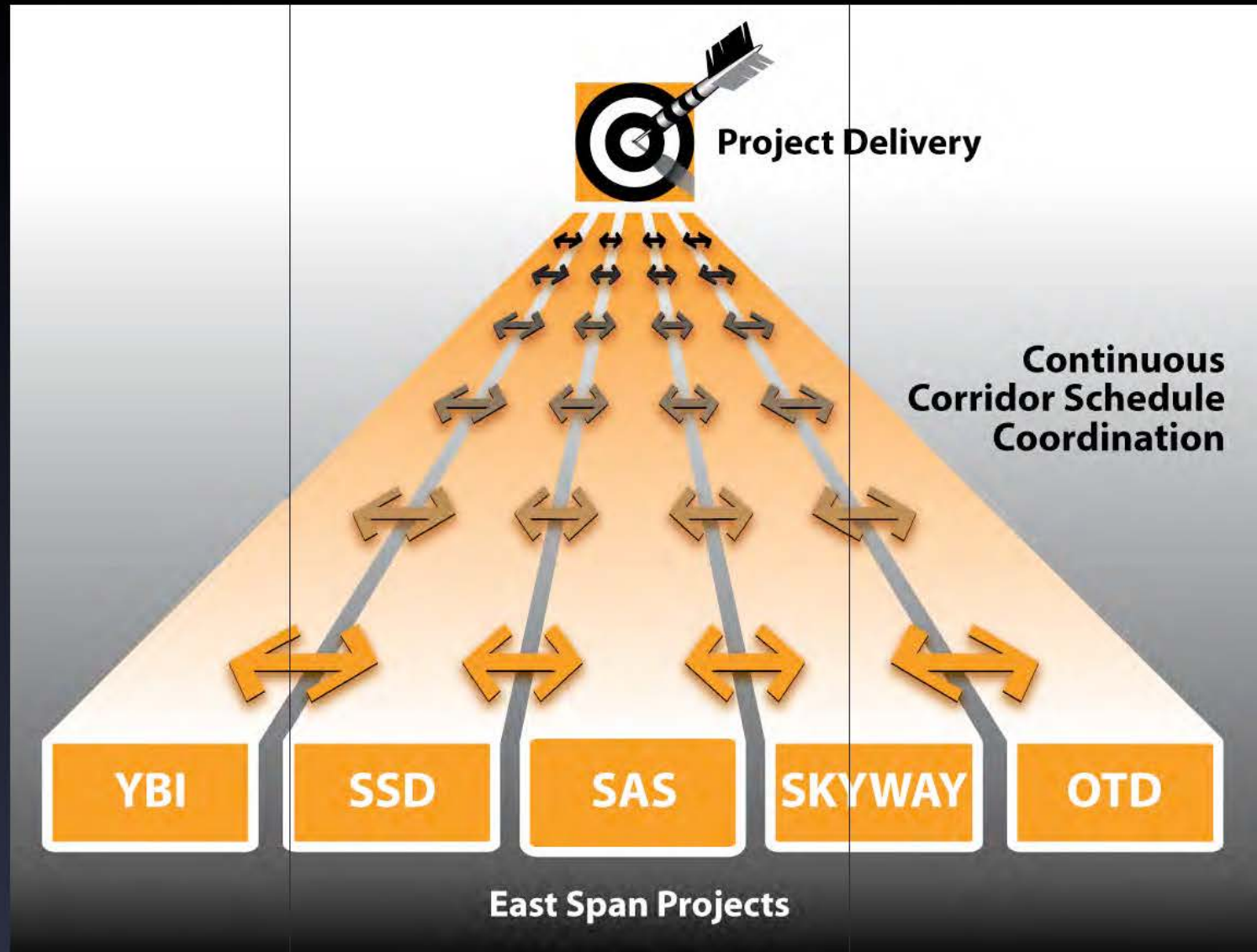
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2006 Highlights



# East Span Integrated Project Coordination



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# West Approach Labor Day Demolition and Eastbound Bay Bridge Closure



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Movie goes here



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# West Approach Outreach Effort



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2006 Highlights



# West Approach Outreach Effort



THE SAN FRANCISCO-OAKLAND  
**BAY BRIDGE SEISMIC SAFETY PROJECTS**  
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## ATTENTION Bay Area Motorists!

**The Bay Bridge Eastbound Will Be  
CLOSED Over Labor Day Weekend  
PLAN AHEAD!**

**BRIDGE TO BE CLOSED EASTBOUND**  
The lower (eastbound) deck of the Bay Bridge will be CLOSED from 11:59 PM Friday night, September 1 until 5:00 AM Tuesday morning, September 5. (Dates and times subject to change)


Expect traffic delays on nearby city streets and allow extra travel time. Motorists should use alternate bridges or take public transit.  
[CLICK HERE](#) for more information

**WHY LABOR DAY?**  
[CLICK HERE](#) to learn more.

**TAKE BART!**  
BART will run 24 hours at select stations. Please visit [www.bart.gov](http://www.bart.gov) for schedule information.

Thank you for your continued patience during this essential work.  
We're making your bridge safer!

**STAY INFORMED!**  
Visit [www.baybridgeinfo.org](http://www.baybridgeinfo.org) for more information.



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Bay Bridge Corridor

WEST APPROACH WEST SPAN YB & TI SAS EAST SPAN DEMO SKYWAY OAKLAND TOUCHDOWN

Home  
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**511** Current Traffic Conditions

**FASTRAK** Express Toll Service

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Arnold Schwarzenegger  
Governor

Sunnie Wright McPeak  
Secretary of Business,  
Transportation and  
Housing Agency

Marian Bergeron  
Chair, California  
Transportation Commission

Jon Rubin  
Chair, Bay Area  
Toll Authority

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Will Kempton  
Director, Caltrans

John Bama  
Executive Director, California  
Transportation Commission

Steve Heminger  
Executive Director,  
Bay Area Toll Authority

## BAY BRIDGE EASTBOUND WILL BE CLOSED

**Labor Day Weekend, September 1-5, 2006**  
Beginning 11:59pm Friday night, until 5:00am Tuesday morning.

**Avoid major traffic delays.  
Plan alternate routes or take transit.**

**LEARN MORE >>**

**Bay Bridge Eastbound (Lower Deck) will be closed Labor Day Weekend -View the Informational Factsheet**

**NEW!** Labor Day Video Public Service Announcement

**NEW!** Labor Day Construction Radio Announcement

[Labor Day Construction Over-View Map with Traffic Flow Alignment](#)

[For Transportation Options to The Art and Soul Festival in Oakland Click Here](#)

[Dial 5-1-1 or visit 511.org](#) for public transit options and traffic information over Labor Day weekend

**BART**  
[www.bart.gov](http://www.bart.gov)

**ACTransit**  
[www.actransit.org](http://www.actransit.org)

**SFMuni**  
[www.sfmuni.com](http://www.sfmuni.com)

**San Francisco Municipal Railway**



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OVERSIGHT COMMITTEE**

CALTRANS

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CALIFORNIA TRANSPORTATION COMMISSION

2006 Highlights

# West Approach Outreach Effort



## THE SAN FRANCISCO-OAKLAND BAY BRIDGE SEISMIC SAFETY PROJECTS

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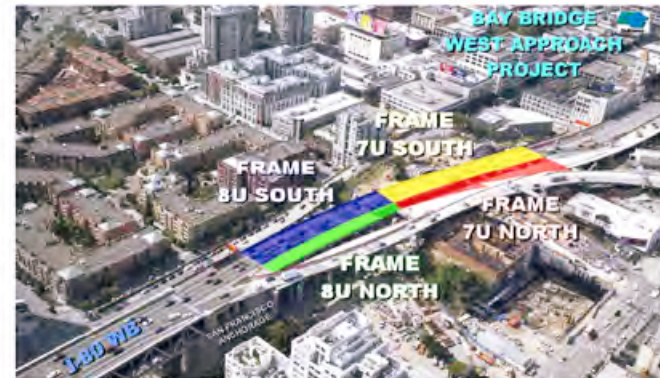
### CLOCKTOWER RESIDENT UPDATE

JULY 20, 2006

Thank you for your continued patience and cooperation during the Bay Bridge Seismic Safety Retrofit Projects on the West Approach. We would not be able to accomplish this essential work without support from our neighbors!

Please note that Caltrans and its partners are continually striving to minimize disruptions to Clocktower by expediting the completion of work. We fully acknowledge, however, that despite our best efforts, demolition and construction work of this magnitude affects neighboring communities. We understand that nighttime work, especially, has affected Clocktower residents. We do our best to avoid scheduling work during night-time hours, but when major lane closures are required and traffic is heavily impacted, we must perform work at night. We sincerely regret any inconvenience this may cause.

Below is a brief Progress Report of our work in your area to date, and a description of upcoming work that will affect residents of Clocktower. We are pleased to inform you that almost 70% of the work has already been completed and anticipate that the work affecting Clocktower will be entirely done by late 2006. We will continue to provide regular updates prior to the beginning of major work that impacts your neighborhood.



Please refer to this color-coded diagram indicating the project areas while reviewing the work outline below.

#### PROGRESS REPORT:

Seismic retrofit work on the West Approach started in June, 2003. Over the past three years, a significant amount of work has been completed, as described below. The majority of the work affecting Clocktower residents has already been finished. We anticipate that the work having an effect on Clocktower will be completed by Summer 2006.

Below is a detailed description of work completed to date:

- The area shaded in red (Frame 7U North) has been completed, including the demolition, preparation for reconstruction (falsework erection) and the reconstruction work.
- The demolition of the Harrison Street off-ramp has been completed. Please note that in order to minimize the impact of this work on the neighborhood, the demolition, which was originally slated to continue for three months, was accomplished in just one week and. We hope that by consolidating the work into one weekend, we reduced the inconvenience to Clocktower residents.
- The demolition of the area shaded in green (Frame 8U North) has been completed and the reconstruction of this portion is currently ongoing.



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## 2006 Highlights



## 31

# West Approach Multi-Agency Effort

511

AC Transit

Alameda/Oakland Ferry

Amtrak

BART

California Highway Patrol

City and County of San Francisco

Golden Gate Transit

Greyhound

MUNI

Samtrans

Vallejo Ferry



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OVERSIGHT COMMITTEE

CALTRANS

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CALIFORNIA TRANSPORTATION COMMISSION

2006 Highlights



# West Approach Transit Coordination



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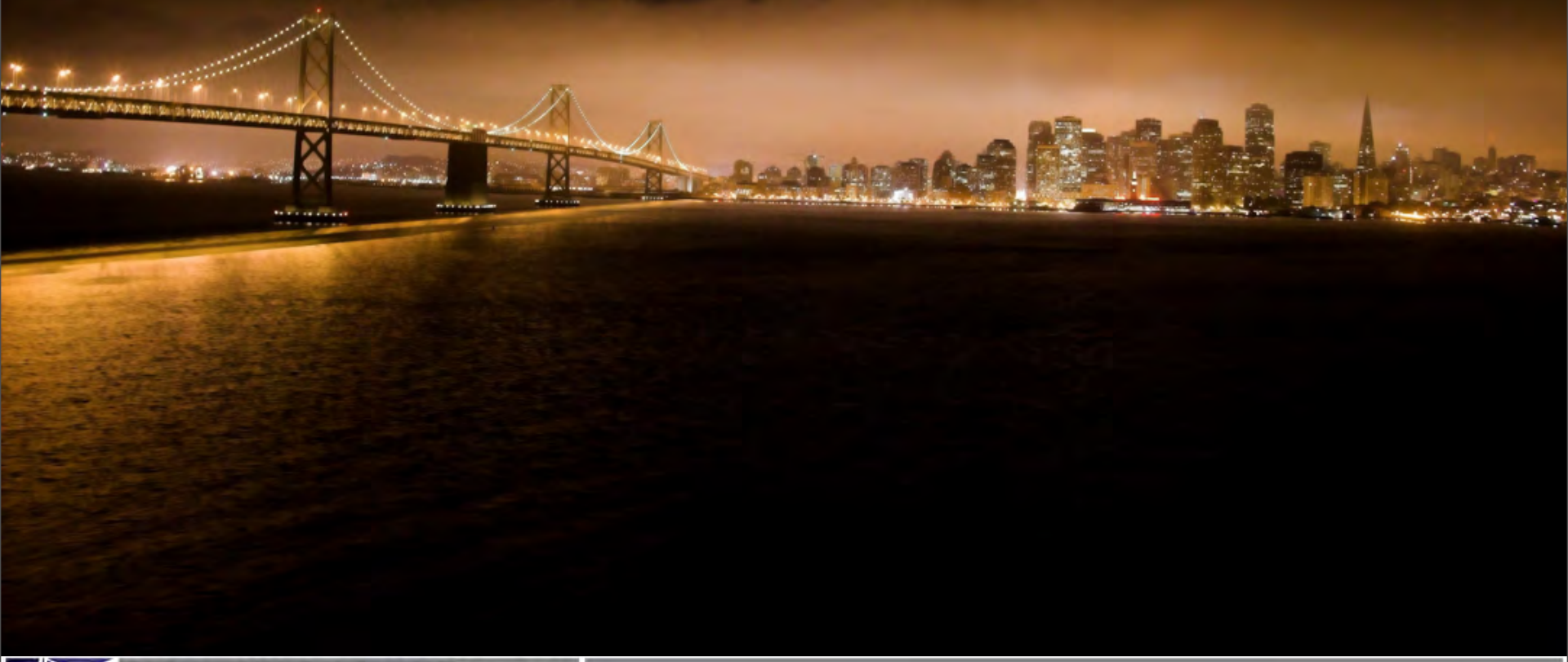
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2006 Highlights

# 2007 Look Ahead



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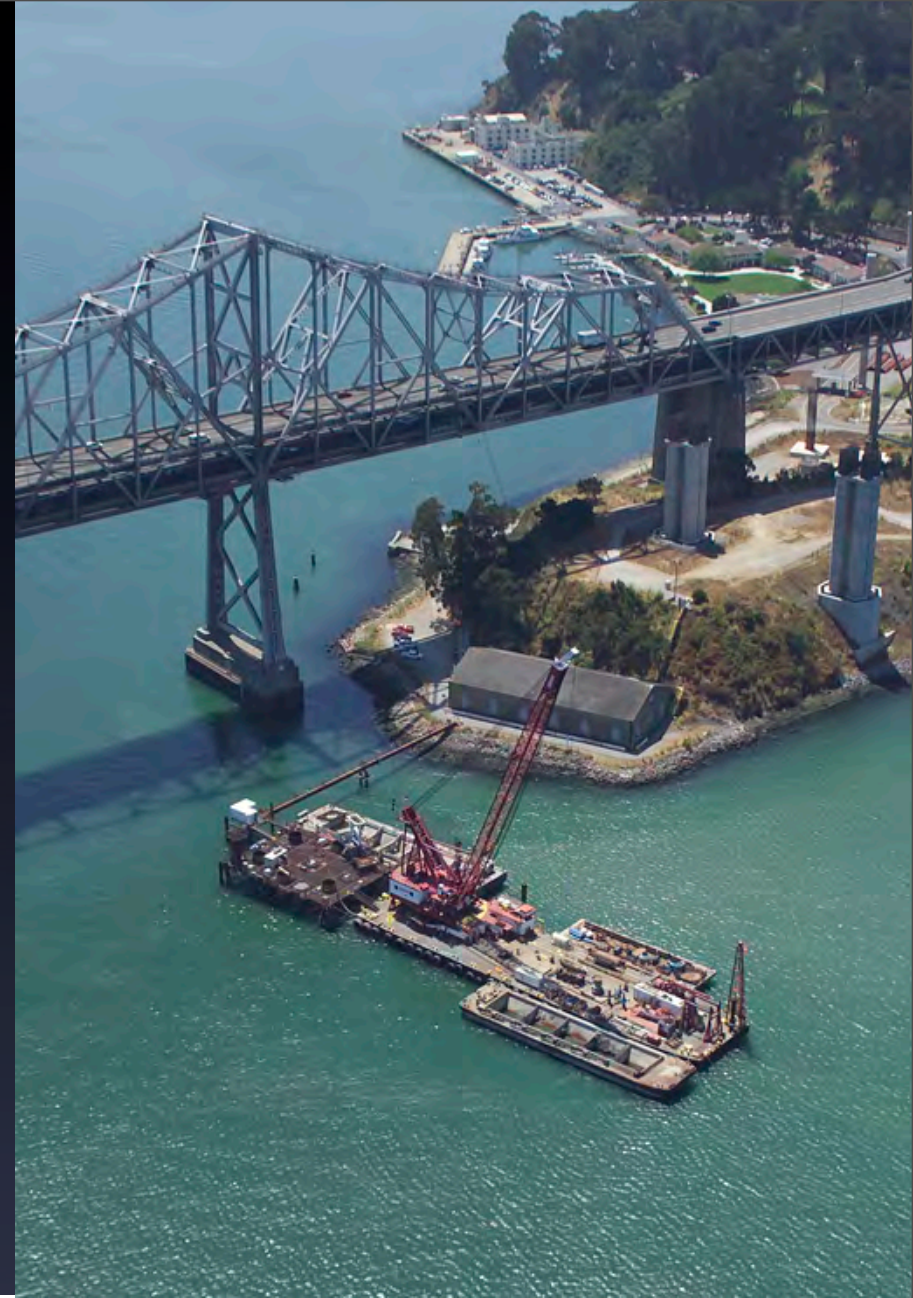
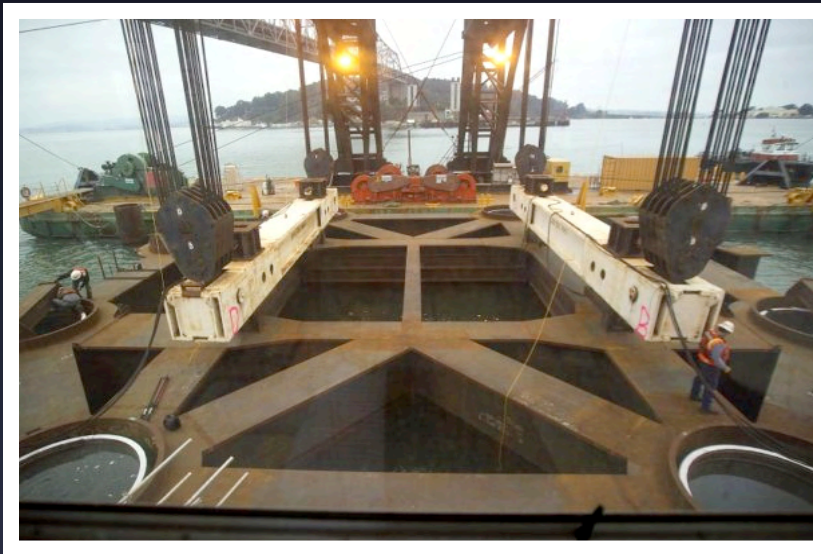
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# SAS Marine Foundation Completion



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2007 Look Ahead



# West Approach Temporary Bypass Eastbound



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2007 Look Ahead



# West Approach Temporary Bypass movie



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# SFOBB East Span YBI Viaduct Replacement



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2007 Look Ahead





\$1.2 Billion Skyway complete  
December 2007



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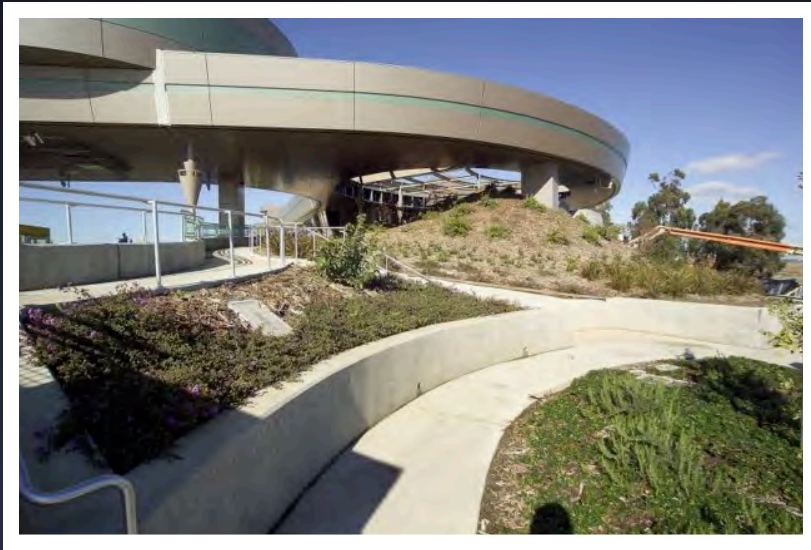
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# Benicia Bridge Opening Event



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2007 Look Ahead



# Closing Remarks



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# Steve Heminger

Executive Director

Metropolitan Transportation Commission

Toll Bridge Program Oversight Committee Member



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2007 Legislative Update

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# John Barna

Executive Director

California Transportation Commission

Toll Bridge Program Oversight Committee Member



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2007 Legislative Update

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# Will Kempton

Director

California Department of Transportation

Toll Bridge Program Oversight Committee Chairman



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2007 Legislative Update

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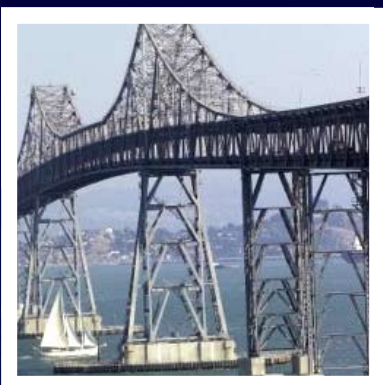
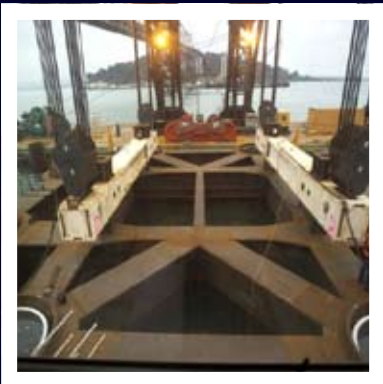
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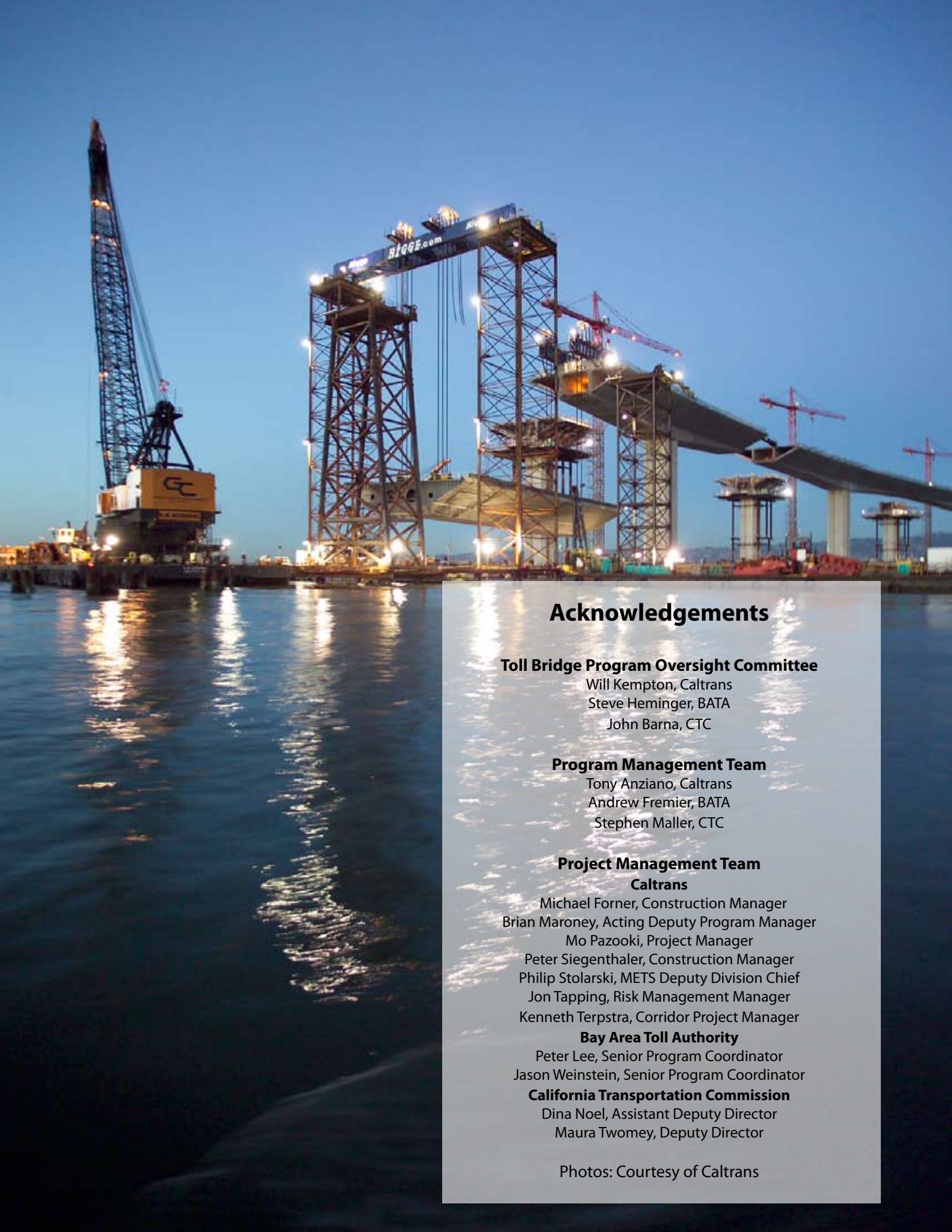
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## 2007 Legislative Update



February 2007





## Acknowledgements

### **Toll Bridge Program Oversight Committee**

Will Kempton, Caltrans

Steve Heminger, BATA

John Barna, CTC

### **Program Management Team**

Tony Anziano, Caltrans

Andrew Fremier, BATA

Stephen Maller, CTC

### **Project Management Team**

#### **Caltrans**

Michael Forner, Construction Manager

Brian Maroney, Acting Deputy Program Manager

Mo Pazooki, Project Manager

Peter Siegenthaler, Construction Manager

Philip Stolarski, METS Deputy Division Chief

Jon Tapping, Risk Management Manager

Kenneth Terpstra, Corridor Project Manager

#### **Bay Area Toll Authority**

Peter Lee, Senior Program Coordinator

Jason Weinstein, Senior Program Coordinator

#### **California Transportation Commission**

Dina Noel, Assistant Deputy Director

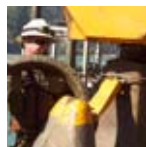
Maura Twomey, Deputy Director

Photos: Courtesy of Caltrans



# TABLE OF CONTENTS

<b>Executive Summary .....</b>	<b>1</b>
<b>Toll Bridge Program Overview .....</b>	<b>3</b>
Toll Bridge Program Oversight Committee .....	3
Project Teams .....	4
Risk Management .....	4
Program Funding and Budget .....	5
<b>San Francisco - Oakland Bay Bridge: 2006 Highlights .....</b>	<b>7</b>
One Bridge: Many Mega Projects .....	8
West Approach/West Span Retrofit .....	8
West Approach: A Labor Day Weekend Success Story .....	9
East Span Replacement .....	12
Other Bay Bridge Highlights .....	13
Project Schedule .....	14
<b>New Benicia - Martinez Bridge: 2006 Highlights .....</b>	<b>19</b>
<b>Richmond - San Rafael Bridge: 2006 Highlights .....</b>	<b>21</b>
<b>Dumbarton and Antioch Bridges: 2006 Highlights .....</b>	<b>23</b>
<b>2007 Look Ahead .....</b>	<b>25</b>
San Francisco - Oakland Bay Bridge .....	25
New Benicia - Martinez Bridge .....	26
Richmond - San Rafael Bridge .....	26
Dumbarton and Antioch Bridges .....	26
Toll Bridge Program .....	26



# Executive Summary





## Executive Summary

To Members of the Legislature,

With the passage of Assembly Bill 144 in July 2005, the State Legislature presented a road map for completing essential seismic safety work on State-owned toll bridges. One of the key requirements of this visionary legislation was the establishment of the Toll Bridge Program Oversight Committee (TBPOC) – an interagency partnership between the California Department of Transportation (Caltrans), the California Transportation Commission (CTC), and the Bay Area Toll Authority (BATA). Our mission is to ensure that the seismic safety work – the most ambitious retrofit program on record – is completed in a cooperative, expeditious, and cost effective manner. Included within the purview of the TBPOC is the completion of the new East Span of the San Francisco-Oakland Bay Bridge and the new Benicia-Martinez Bridge, which is funded through Regional Measure 1 (RM1).

In 2006, we focused on the multiple and highly complex “mega projects” on the Bay Bridge. In addition to moving forward with projects on the bridge’s East Span, we made significant progress with the retrofit-by-replacement of the one-mile Interstate 80 West Approach to the bridge in San Francisco. Our agencies are working cooperatively at all levels – from design and construction, to scheduling and fiscal risk management – to ensure our continued success.

Last year marked the awarding of the largest public works contract in State history; the successful completion of two of the heaviest lifts on record; the orchestration of complex demolition and construction work; and equally complex traffic shifts. Much of this work required extensive public outreach. Key to our success in the past year was the assistance that we received from State legislators and other stakeholders in garnering public support. As a result, we have made major inroads in informing your constituents about the importance of the Bay Bridge Seismic Safety Projects.

This Legislative Update highlights some of our most significant accomplishments in 2006 and looks ahead at the challenges that we anticipate in 2007.

### Highlights of 2006

#### **San Francisco - Oakland Bay Bridge:**

- The enactment of AB 144 enabled us to resume work in late 2005 on the marine and land-based foundations for the new Self-Anchored Suspension (SAS) span, which will be the signature span of the new bridge. We were also able to move forward with the competitive bid process to build the SAS – awarding a contract to American Bridge/Fluor Enterprises (ABF), a Joint Venture, as the low bidder, with a bid below the project estimate.
- In August 2006, a major milestone for the 1.2-mile Skyway was reached with the successful lift of a 1,750-ton steel segment, one of two enormous steel segments that will connect the Skyway to the SAS.
- In December 2006, the last of 452 pre-cast concrete segments comprising the Skyway was hoisted, completing the bridge structure.
- Major milestones were also reached in 2006 on the one-mile stretch of freeway leading to the bridge from San Francisco, known as the West Approach. The elaborately staged demolition and construction work required the most intensive effort to date in public outreach, transit coordination, and interagency cooperation – most notably over Labor Day weekend, when the entire lower deck of the bridge was closed to traffic for nearly 77 hours.

#### **Richmond - San Rafael Bridge:**

- The Richmond-San Rafael Bridge seismic retrofit project was completed in 2005, with a savings of \$89 million. In October of 2006, our Committee authorized the transfer of these cost savings to the Toll Bridge Seismic Retrofit Program’s Contingency, which is currently budgeted at \$989 million.



### **New Benicia - Martinez Bridge:**

- In October 2006, the last of 344 cast-in-place concrete segments of the new bridge were poured. Closely following this work in December 2006, the final closure and hinge pours were completed that tied the bridge piers together.

### **2007 Look Ahead**

The coming year presents numerous complex construction activities, as well as the anticipated completion of several significant projects. These projects, some representing firsts in design and construction, will present significant challenges next year and through completion. Our risk management teams will continue to coordinate corridor schedules and project delivery to help ensure our success.

Most notably, we will continue to work towards completing the series of highly complex projects on the West Approach and East Span of the Bay Bridge. The major activities planned for 2007 include:


- The final major traffic shift from the West Approach onto a temporary structure will occur, followed by the demolition and reconstruction of the eastbound viaduct;
- The final touches will be completed on the Skyway section of the bridge, with a celebration ceremony slated for year's end;
- The marine foundations of the SAS span will near completion, and construction will commence on the first in a series of contracts to build the Oakland Touchdown structure;
- Fabrication will begin on the SAS tower and roadway deck;
- Finally, the Yerba Buena Island viaduct (referred to throughout this document as the West Tie-In Phase 1) may be removed and replaced as early as fall of 2007, requiring a full bridge closure over a three-day week-end. The closure will be modeled after the successful public outreach and transit agency coordination executed for the Labor Day Weekend 2006 closure.

Lastly, the year 2007 will also mark the opening of the new Benicia-Martinez Bridge.

As we progress, we will continue to keep you and your constituents informed. Our focus will be to continue to look for opportunities to accelerate work on the bridges and expedite seismic safety. Your continued support will remain essential to our success. Thank you.

### **Toll Bridge Program Oversight Committee**



 Will Kempton, Chair  
Director  
Department of Transportation



John Barna  
Executive Director  
California Transportation Commission



Steve Heminger  
Executive Director  
Bay Area Toll Authority





# **Toll Bridge Program Overview**





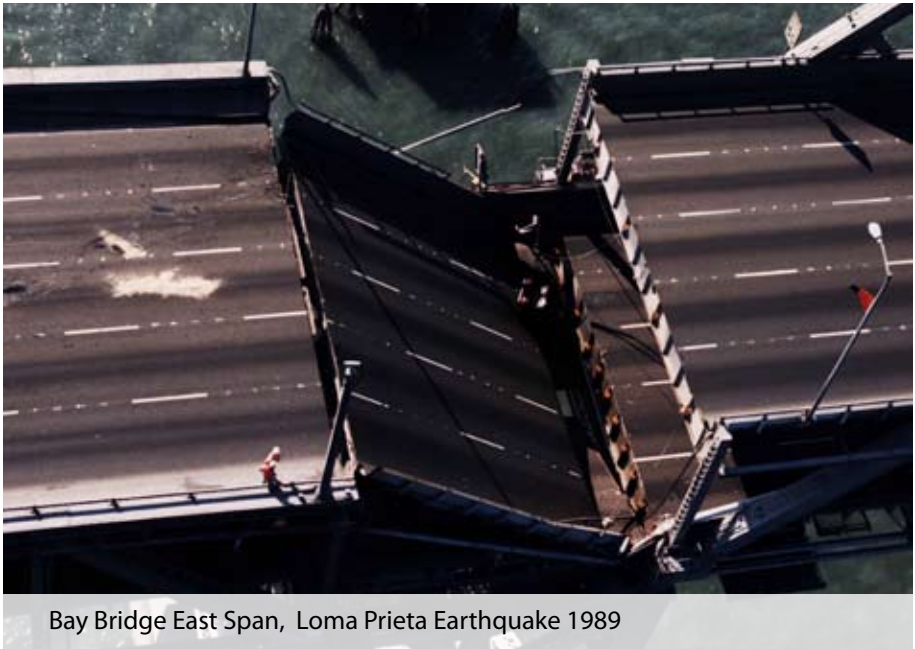
Almost 20 years ago San Francisco Bay Area voters approved Regional Measure 1 (RM1), authorizing an increase in Bay Area bridge tolls. The funding from RM1 was earmarked for toll bridge congestion relief projects, including construction of the new Benicia-Martinez Bridge. In 1997, Senate Bills (SB) 60 and 226 were signed into law, establishing the Toll Bridge Seismic Retrofit Program, which gave the California Department of Transportation (Caltrans) the funding to begin the retrofit of six of the seven State-owned toll bridges in order to strengthen, preserve and maintain California's renowned highway and bridge network. Under the statute, the Metropolitan Transportation Commission (MTC), through the affiliated Bay Area Toll Authority (BATA), was assigned the responsibility for selecting the final design for the East Span of the San Francisco-Oakland Bay Bridge, and Caltrans was assigned the responsibility of the design and construction of the new bridge.

**TOLL BRIDGE PROGRAM  
OVERSIGHT COMMITTEE**

In July 2005, the passage of Assembly Bill (AB) 144 combined the remaining new bridge elements of RM1 with the Toll Bridge Seismic Retrofit Program

and created the Toll Bridge Program and the Toll Bridge Program Oversight Committee (TBPOC) to implement a project oversight and project control process for the program. The TBPOC consists of the directors of the three

partnering agencies: Caltrans, BATA, and the California Transportation Commission (CTC). The projects included in the Toll Bridge Program are shown in Table 1.



# Toll Bridge Program Overview

Table 1: Toll Bridge Seismic Retrofit Program

1	San Francisco-Oakland Bay Bridge East Span Replacement	Construction
	San Francisco-Oakland Bay Bridge West Approach Replacement	Construction
	San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
2	San Mateo-Hayward Bridge Seismic Retrofit	Complete
3	Richmond-San Rafael Bridge Seismic Retrofit	Complete
4	Eastbound Carquinez Bridge Seismic Retrofit	Complete
5	Benicia-Martinez Bridge Seismic Retrofit	Complete
	New Benicia Martinez Bridge (Regional Measure 1)	Construction
6	San Diego-Coronado Bridge Seismic Retrofit	Complete
7	Vincent Thomas Bridge Seismic Retrofit	Complete

Source: Toll Bridge Seismic Retrofit and Regional Measure 1 Programs, Monthly Progress Report December 2006, Toll Bridge Program Oversight Committee.



*The legislative mandate of the TBPOC is as follows (according to AB 144, Chapter 71, Section 10c):*

*The Toll Bridge Program Oversight Committee, created pursuant to Section 30952.1, shall implement a project oversight and project control process for the Benicia-Martinez Bridge project and the state toll bridge seismic retrofit program projects. The committee's project oversight and control processes shall include, but not be limited to, reviewing bid specifications and documents, providing field staff to review ongoing costs, reviewing and approving significant change orders and claims, and preparing project reports.*

*Furthermore, as defined by Government Code Section 30952.1, the TBPOC does the following:*

- Review project status, program costs, and schedules;
- Resolve project issues;
- Evaluate project changes;
- Develop and regularly update cost estimates, risk assessments, and cashflow requirements for all phases of the toll bridge projects; and,
- Provide program direction.

The year 2006 represented the first full year of the Committee's operation. The TBPOC has reviewed, provided recommendations, and approved contractual, budgetary and schedule related issues in a timely fashion with the support from member agencies. The TBPOC authorized splitting the Yerba Buena Island Transition Structure and Oakland Touchdown projects in order to facilitate construction efficiently. The TBPOC continues to identify, manage, and address schedule and cost related risks, while identifying opportunities for schedule advancement and early delivery of seismic safety.

Supporting the TBPOC is the Program Management Team (PMT), which consists of management staff from the three partnering agencies. The PMT

meets on a regular basis, further facilitating interagency coordination and progress.

## PROJECT TEAMS

There are several hundred individuals involved in designing, constructing, scheduling, and managing the Seismic Safety Projects. They are organized into a sophisticated network of interdisciplinary teams, with the objective of "project delivery" – the design and construction of each of the many projects that are a part of the Seismic Safety Program. Each project has teams of engineers, contractors, and support staff who collaborate in the areas of Design & Construction, Corridor Scheduling, Risk Management, Safety, and Maintenance to successfully deliver each project. The project delivery process is illustrated in Figure 1.

From design through construction, there are multiple phases of review and oversight, during which the various project delivery teams are responsible for the evaluation of potential risks, the coordination of project schedules, on-site inspection and safety, and maintenance, to name a few. Construction teams may include representatives from local and regional agencies, including transportation agencies, emergency services, and the Public Information Office, who work together on major construction projects involving the public.

## RISK MANAGEMENT

Assembly Bill 144 requires Caltrans to develop and implement an expanded comprehensive risk management plan for the Toll Bridge Program to augment the established risk management protocols and mitigation measures already in place. The Toll Bridge Program includes the largest Caltrans project to date, presenting a variety of engineering and construction challenges. In response, Caltrans has developed a comprehensive risk management plan, which includes state-of-the-art methods, tools and processes for managing and minimizing risk by:

- Obtaining early warning of challenges to program goals and targets, and of opportunities for improving prospects;
- Providing the Toll Bridge Program management with focused information to support budget and schedule forecasting, effective risk-taking, and on-going program and project corrections;

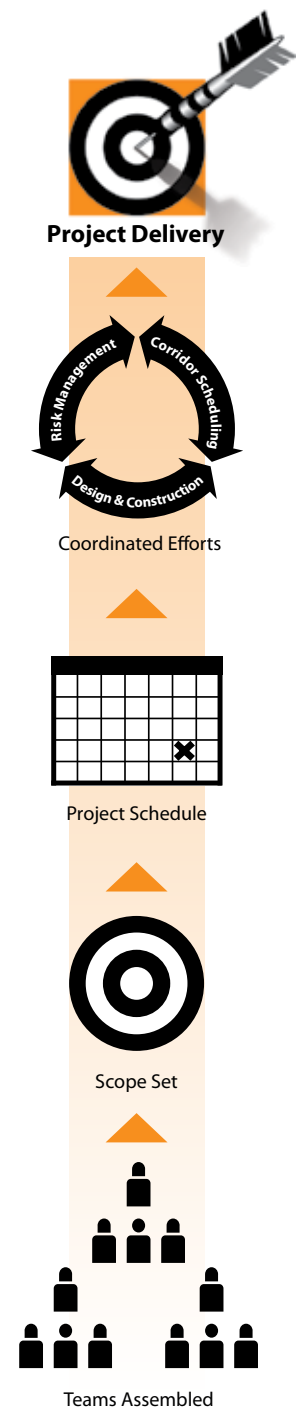


Figure 1: Project Delivery





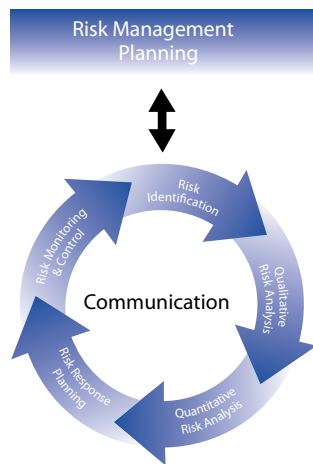


Figure 2: Risk Management

- Reducing the potential for cost and schedule overruns;
- Establishing and maintaining adequate contingency reserves.

The substantial evolution of the Toll Bridge Risk Management Program is evidenced by the appointment of the Risk Management Coordinator to a Transportation Research Board committee that develops guidance on risk management of transportation projects nationwide. The Risk Management Coordinator has also been asked to give presentations to major state and national transportation forums. In addition, the Toll Bridge Risk Management Team (RMT) has been asked to

assist other Caltrans districts with developing their risk management capabilities.

Caltrans has assembled a Risk Management Team for each of the contracts and shares risk management information with the TBPOC. With the continuing support and cooperation of project teams and the agencies, risk management has become an integral component of program and project management. In a continuous process of which communication is a critical component, the RMT works with the Design and Construction teams to continually monitor, minimize, or eliminate risks, as illustrated by Figure 2. The RMT has developed an effective approach which focuses on managing the most significant risks, typically identified by having both a high probability of occurrence and high impact on project delivery.

Notable achievements in 2006 include:

- The receipt of multiple competitive bids on the SAS project as a result of innovative quantitative cost and schedule risk analyses;
- The active management of risks by assigning to each contract a cross-functional risk response team who worked closely with representatives from partnering agencies;

- Integrated and coordinated contract schedules developed by the Schedule team, who identified potential risks and evaluated opportunities to shorten overall construction duration;
- Facilitation of budget and schedule forecasting through quantitative risk analysis input provided to the program management team.

## PROGRAM FUNDING AND BUDGET

Along with the establishment of the TBPOC, AB 144 consolidated the administration of all toll revenues collected on the seven State-owned Bay Area toll bridges and financing of the Toll Bridge Program under the jurisdiction of BATA. The entire \$8.7 billion AB 144/SB 60 baseline budget for the program is being funded under a BATA approved finance plan that is funded from a combination of tolls with state and federal transportation funding. The toll funding for the program includes the \$1 toll increase (from \$3.00 to \$4.00 for automobiles) as authorized in AB 144 that took effect on January 1, 2007. See Appendix A for more information on the program budget.



Construction team at work



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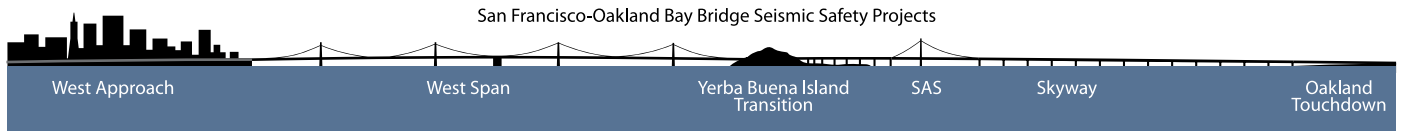




# San Francisco - Oakland Bay Bridge







Carrying an average of 280,000 vehicles a day, the San Francisco-Oakland Bay Bridge is the third busiest bridge in the nation. The existing bridge consists of three major components: West Approach, West Span, and East Span. The series of Bay Bridge Seismic Safety Projects currently underway represents the most ambitious public works undertaking in California's history. Keeping the large volume of traffic flowing as major construction work progresses has been a considerable challenge during each of these projects and has required innovative scheduling, staging, and traffic realignments. Public outreach efforts have greatly assisted in gaining public understanding and support for the Bay Bridge construction activities, and the patience and cooperation of motorists have enabled the accomplishment of what at times seemed im-

## San Francisco - Oakland Bay Bridge

### 2006 Highlights

- *SAS bid award*
- *West Approach Labor Day Public Outreach*  
*Public Transit Coordination*  
*Multi-Agency Effort*
- *Skyway Highlights*  
*Transition Span*  
*Stockton Yard Completion*  
*Segment Erection*

possible – a full lower deck closure for nearly 77 hours.

Projects of this magnitude must include a wide array of stakeholders, including legislators, transportation agencies, local, regional and federal government, community and special interest groups, motorists, the media, and the general public. The work has involved significant outreach on the ground level through meetings, canvassing, and one-on-one outreach at the neighborhood level, most notably near the



TOLL BRIDGE PROGRAM  
OVERSIGHT COMMITTEE

2007 LEGISLATIVE UPDATE



Self-Anchored Suspension Span and Skyway

West Approach in San Francisco. It has also required extensive environmental review, monitoring, and mitigation in and near the San Francisco Bay in environmentally sensitive marine habitat.

### One Bridge: Many Mega Projects

Following the 1989 Loma Prieta Earthquake, when a 250-ton section of the East Span's upper deck collapsed, an exhaustive study was performed by seismologists from around the world on all the major bridges in California. The Bay Bridge presents an unusual challenge

in seismic safety design because of the complex geological formations between Yerba Buena Island and Oakland, together with the identified need for a lifeline structure. In order to seismically upgrade each portion of the Bay Bridge and maintain its functionality following a major seismic event, studies determined that the West Span, which was relatively undamaged during the Loma Prieta Earthquake, would require a seismic retrofit of the existing structure. The East Span, which sustained significant damage, would have to be

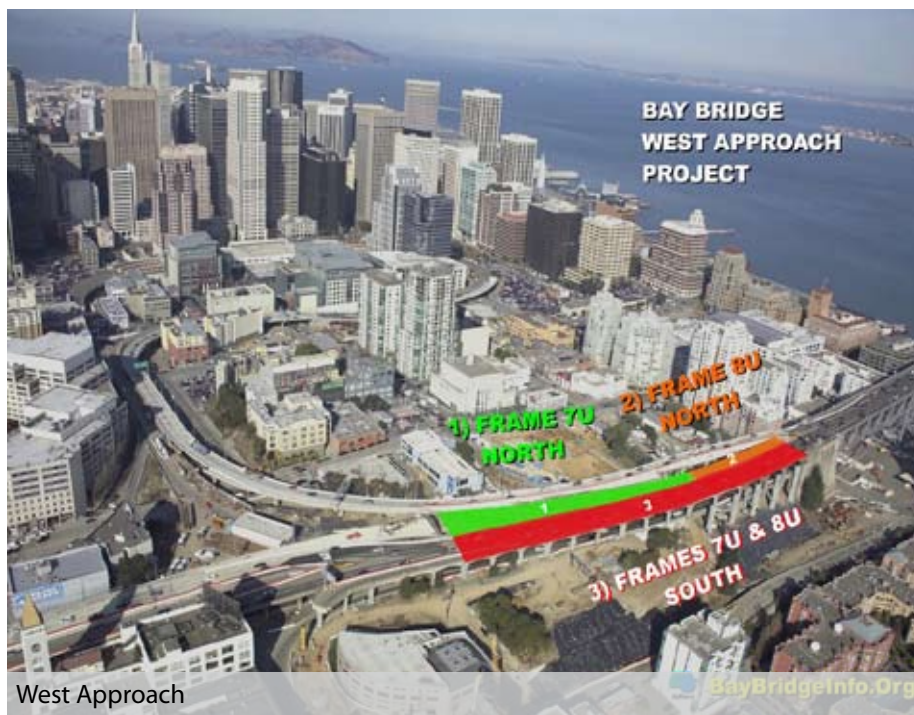
entirely rebuilt. The one-mile West Approach to the bridge in San Francisco, which traverses the busy South of Market neighborhood, would require a retrofit-by-replacement.

Extensive seismic retrofit work has already been accomplished on several portions of the bridge, including the complete retrofit of the West Span suspension bridges. Other work is currently underway, throughout the corridor, in an elaborately choreographed effort to perform massive reconstruction and building with minimal impacts to daily traffic flow. Other projects are yet to begin. The entire bridge, including the signature Self-Anchored Suspension (SAS) span east of Yerba Buena Island, is slated for completion in 2013, followed by the demolition of the existing East Span.

### West Approach/West Span Retrofit

Work on the West Approach, a one-mile section of Interstate 80 in San Francisco between 5th Street and the San Francisco anchorage, involves completely demolishing existing structures and replacing them with seismically sound structures, within the footprint of the existing structure. This is perhaps the most challenging project ever constructed by Caltrans with respect to construction staging and neighborhood relations. Complete replacement must be achieved in a dense urban setting while keeping the West Approach completely open to peak traffic.

The double-deck roadways from 5th Street to the anchorage will be rebuilt so that each deck has an independent support column and foundation. Much of this work occurs within feet – and sometimes even inches – of residential and office buildings. To keep traffic flowing, the work requires elaborate staging: a temporary structure is built and vehicles are then rerouted. The old structure is removed, and work begins



West Approach







on the new structure. When the new structure has been completed, vehicles are then rerouted and the old structure is demolished. The replacement project is ongoing, and scheduled to be complete in 2009.

An extensive retrofit of the West Span, which reaches from the San Francisco to the Yerba Buena Island (YBI) anchorage, was completed in 2004. Seismic safety work on the span entailed a five-year effort to strengthen each section of the double-deck twin suspension spans.

### West Approach: A Labor Day Weekend Success Story

The West Approach successfully completed two major phases of demolition during 2006 – the larger of which occurred over Labor Day weekend, with the demolition of a 1,000-foot section of steel and concrete on the approach's upper deck near the San Francisco anchorage. To help ensure public safety, this monumental task required the closure of the bridge's lower deck for nearly 77 hours during the holiday weekend.

From a command center in San Francisco, the West Approach team worked closely with representatives from public transit and emergency service agencies. Many other agencies, including



West Approach

the California Highway Patrol, Bay Area Rapid Transit (BART), ferry and bus services and 511, the City and County of San Francisco (CCSF) Department of Parking and Traffic, the San Francisco Police Department, and numerous other CCSF agencies coordinated efforts to keep traffic flowing safely during this eventful weekend.

A major challenge was providing 24-hour public transit access to the lower deck on a limited basis throughout the weekend. Caltrans developed a plan with the San Francisco Municipal Railway (MUNI), AC Transit, and other tran-

sit agencies which required that a path for eastbound public transit vehicles be cleared each hour through most of the weekend.

The Labor Day closure required the most extensive public outreach performed to date on the Bay Bridge Project, as well as extensive coordination of public transit and the cooperation of numerous regional and local agencies. Numerous agencies coordinated efforts to disseminate information about the closures to a wide array of stakeholders, locally and throughout the state. MTC/511 provided trip planning updates on its website. BART and ferry boats, which provided expanded service during the closure, distributed fact sheets, ran electronic messages, and provided website updates. Information was also regularly updated through the official Bay Bridge website: [www.baybridgeinfo.org](http://www.baybridgeinfo.org). MUNI featured posters on more than a thousand vehicles, and other transit agencies also provided information to their riders. This intensive informational campaign proved successful in keeping the public fully informed of the upcoming bridge closure.



Demolition of West Approach structural frames over Labor Day Weekend





### East Span Replacement

The new East Span will appear as a single unified span although it consists of several different structures. The graceful profile of the structure is revealed as a sleek and elegant white line which spans between Yerba Buena Island and the Oakland shore. To further enhance its aesthetic appeal, the bridge will be lighted with a procession of roadway and tower lights that will provide a unique nighttime experience for both motorists and distant viewers. The bridge has also been designed to carry a light pipe to highlight the span as it crosses the Bay.

The new bridge will feature a dramatic Self-Anchored Suspension span connected to the elegant Skyway structure, which will gradually descend towards the Oakland shoreline (Oakland Touchdown). The east- and westbound lanes of the East Span will be reconfigured as side-by-side, thereby providing motorists with increased seismic safety and more expansive views of the Bay Area. The new alignment allows traffic to continue flowing on the existing bridge as the new span is built. The new Yerba Buena Island Transition Structure will connect the SAS to the YBI tunnel, facilitating the transition of side-by-side traffic from the SAS to the upper and lower decks of the YBI tunnel and the West Span.

The new East Span will provide five lanes of traffic and two shoulders in each direction of travel. On the south side of the eastbound deck, a 15-foot wide bicycle/pedestrian pathway will be cantilevered off the structure, such that it appears to “float” alongside the bridge. The bicycle/pedestrian pathway will extend from the Oakland Touchdown to the western terminus of the East Span at YBI. The new East Span is scheduled to be complete in 2013.

### Self-Anchored Suspension Span

When completed, the Self-Anchored Suspension span will be the longest



New East Span Skyway under construction

suspension bridge of its kind and the signature span of the East Span. Its single, elegant tower will reach 525 feet above sea level, complementing the highest tower on the bridge's West Span. The SAS has been designed to be both unique aesthetically and functionally - capable of withstanding a major earthquake. The span itself is asymmetric in that it has a longer front span than back span. The single tower is composed of four separate legs connected by shear link-beams. The facet-

ed forms of the tower legs are tapered and slender to enhance their appearance and to allow light to penetrate the interior of the tower. The link-beams are designed to manage seismic forces during an earthquake, preventing catastrophic damage to the main structure. Any damaged link-beams can later be removed and replaced.

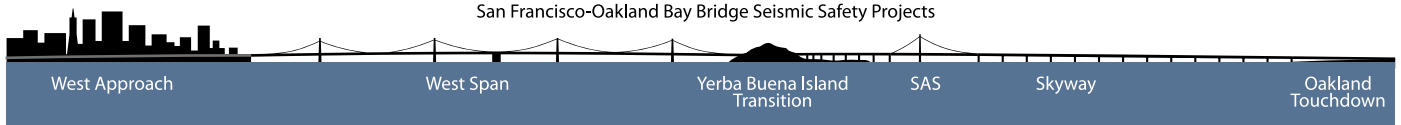
In August 2006, the SAS span received the “Best of What’s New” Award from *Popular Science* magazine. It is the



Self-Anchored Suspension Span rendering







Stockton Pre-Cast Yard

longest single tower, self-anchored suspension bridge in the world. Traditional cable suspension bridges have twin main cables. These cables support the roadbed and are anchored to separate large concrete structures in the ground. By contrast, there is only one main cable on the new SAS span; it will be anchored to the deck on the east end, carried over the tower, and looped around the roadbed at the west end. It is this unique asymmetrical composition of the tower and cable geometry which give the SAS span its dramatic and dynamic appearance.

Work on the SAS foundation was started in late 2005, and includes the construction of water-based and land-based foundations. The land-based foundation on YBI is already complete. The SAS foundation work is on schedule to finish on or before March 2008.

On April 18, 2006 - the centennial anniversary of the 1906 earthquake in San Francisco - the SAS contract was awarded to American Bridge/Fluor Enterprises.

#### Skyway

The 1.2-mile Skyway section is located between the limits of the SAS span and

the Oakland Touchdown. The two parallel Skyway superstructures consist of 452 prefabricated concrete deck segments, supported by piers. The rhythmic pattern and faceted form of the piers, as well as the fluid and aerodynamic shape of the superstructure, is an architectural expression of the geometry of the SAS tower. Large deck segments, with the average size of 25 feet long by 90 feet wide by 30 feet

tall, were pre-cast at a yard in Stockton and transported by barge to the project site.

A major milestone was reached on December 8<sup>th</sup>, 2006 when the last of 452 concrete deck segments that comprise the new Skyway was lifted into place. On average, these segments weigh over 700 tons and are the largest of their kind in the world. A total of 24 piers support the 452 concrete roadway segments that make up these twin parallel bridges that will carry both directions of traffic.

Another major milestone on the Skyway in 2006 was the lifting of enormous steel segments that will connect the Skyway and the SAS. These were the heaviest lifts ever performed by Caltrans in its history. The steel segments each weighed over 1,700 tons and were lifted successfully in February and August 2006.

#### Yerba Buena Island

The Yerba Buena Island Transition Structure (YBITS) will connect the YBI tunnel and the East Span. The YBITS will begin on the island, and allow traffic movement between the double-



Yerba Buena Island W2 Pier





decked structure and the two side-by-side bridge structures of the East Span.

The YBI South South Detour (SSD) is a temporary detour structure parallel to the existing bridge. Detouring traffic onto the SSD will be a major event requiring expanded public information and extraordinary outreach efforts, which will be modeled after the successful West Approach campaigns. While traffic is detoured onto the SSD, the permanent transition structure, YBITS, will be constructed. The SSD is currently under construction.

The West Tie-In (WTI) will be both a part of the new bridge and the SSD. It will be a permanent replacement of the top deck and support of the YBI viaduct, which will ultimately connect with YBITS. WTI will also provide an initial connection to the SSD.

#### Oakland Touchdown

The Oakland Touchdown (OTD) will be located in Alameda County on Interstate 80 west of the toll plaza. It is the structure that will connect to the East Span Skyway. The OTD construction has been divided into three major contracts, in order to coordinate with other major work on the East Span. The three construction contracts are: 1) OTD Submarine Electrical Cable Relocation, 2) OTD #1 (construction of all marine



Media outreach

foundation and the westbound bridge section), and 3) OTD #2 (the eastbound bridge section).

Design work for the OTD #1 is complete, and plans, specifications, and engineer's estimate (PS&E) were submitted to the Caltrans Office Engineer in September 2006. The advertisement for this contract is scheduled for early 2007, and the contract completion is scheduled for late 2009.

The OTD #2 contract will occur once the westbound traffic is shifted onto the new SAS. The OTD #2 contract will be advertised in 2010.

The TBPOC divided the primary work of the Oakland Touchdown into two contracts (OTD #1 and OTD #2) to reduce overall risk and create an opportunity for corridor schedule advancement.

#### Other Bay Bridge Highlights Neighborhood Outreach

The Bay Bridge Seismic Safety Projects, especially work on the West Approach and Yerba Buena Island, affect project neighbors. Consequently, special efforts have been made to keep these neighbors informed about upcoming work.

Neighborhood and broader public meetings are scheduled as needed to discuss construction activities and to hear from local residents and business owners. Updated information on

bridge construction affecting project neighbors can be viewed on the project website: [www.baybridgeinfo.org](http://www.baybridgeinfo.org). The website provides information on construction activities and roadway closures. In total, hundreds of public meetings have been held, numerous phone inquiries have been responded to, and public announcements and other information have been disseminated throughout the Bay Area and beyond.

The Labor Day weekend closure required the largest neighborhood outreach to date and extended well beyond the immediate project vicinity. A team of over 50 youths from community-based organizations helped to distribute nearly one million fact sheets about the closures to project neighbors, as well as to hotels and hospitals, taxi and shuttle services, chambers of commerce, and tourism offices throughout the Bay Area. They also canvassed regional airports. Changeable message signs throughout the state also informed drivers about the closure.



#### Bay Bridge Public Information

In 2005, the TBPOC approved an extensive Communications Plan to guide community outreach activities forward. This plan describes key methods and processes for minimizing potential disruption to motorists and the general public during construction, and to keep the public, motorists, local government, transit agencies, residents and businesses informed of major construction activities.



Oakland Touchdown rendering







Located at the foot of the bridge at Pier 7 in Oakland, the Public Information Office (PIO) reached out to a wide array of stakeholders during the past year through several monumental public outreach campaigns. The Office also organized several contractor outreach meetings during the advertisement of the SAS and the stormwater treatment contracts; provided numerous construction site tours and presentations; and established a media archive to chronicle the coverage of this historic work.

In 2006, the Bay Bridge Public Information Office launched the following communication tools:

- A new definitive website, providing up-to-date information for all of the Bay Bridge projects;
- A new newsletter, *Bay Bridge News*, distributed to over 5,000 subscribers in print and electronically, covering major project milestones;
- E-Alerts providing timely information regarding upcoming major construction activities.

Media outreach is a key component of the Communications Plan. In 2006, the Bay Bridge was favorably featured in numerous media outlets. The PIO team

also provided several media outreach events to mark major project milestones, including the SAS bid opening and award, the pre-cast segment lifts on the Skyway, and the completion of segment fabrication at Stockton Yard. The Office assisted in the creation of several national documentaries and feature-length programs produced by the History Channel, National Geographic, Discovery, CBS, and the Science Channel, to name a few.

For its outstanding work, the Bay Bridge Public Information Office was honored with several noteworthy awards in the past year, including the American Association of State Highway and Transportation Officials award for Best National Print/Electronic Publications Media Kit and the Metropolitan Transportation Commission's "Excellence In Motion" award, recognizing the Office's extensive public outreach efforts during the lower deck closure over Labor Day weekend on the West Approach.

#### Context Sensitive Design

Context Sensitive Design (CSD) is a process for achieving design excellence by developing transportation solutions that require continuous, collaborative communication and consensus-building between transportation agencies,

professionals, and stakeholders. A common goal of this process is to develop a facility that is harmonious with the community and preserves aesthetics, history and environmental resources, while integrating these innovative approaches with traditional transportation goals for safety and performance.

Located in the magnificent Bay Area landscape, the East Span warrants landmark attention. This new East Span will serve as "a bridge of the 21st century" that will take its rightful place among the neighboring West Span and the Golden Gate Bridge as a Bay Area landmark, serving as a gateway to Oakland and the East Bay. The visual success of this structure is due in part to the goals of CSD policy. MTC, the San Francisco Bay Conservation and Development Commission (BCDC), the community, and bicycle advocates, with special recognition to Alex Zuckerman, were vital in this effort. They worked closely with Caltrans and their design consultants, as well as many other agencies, and will have had a lasting effect on the overall appearance and design of the structure, as well as the environmental mitigations and protections implemented as part of the project.

Much of the progress on the bridge for 2006 was influenced by past and current design with stakeholders, and is evident in the contract documents (plans and specifications), construction practices, and completed portions of the SAS and Skyway structures. The architectural form and detail of the SAS, Skyway, piers, and bicycle/pedestrian pathway, are all a result of this collaborative process. The fact that the SAS and bicycle/pedestrian pathway are a part of the project today is truly a triumph in CSD, in that it was the community that rallied and supported these amenities. Further, efforts to minimize adverse impacts to the environment have been a continued priority of this project, and have been implemented as part of the construction process to



East Span Bicycle/Pedestrian Pathway



restore tidal habitat, limit fish mortality, and enhance bird habitat.

In line with the Context Sensitive Design approach, Caltrans will be working again with local and regional stakeholders to shape the development of a "Gateway Park" just south of the new East Span's touchdown. This opportunity, created with the shift of the bridge alignment to farther north, provides the potential for development of a new park that would transform this Bay frontage into a natural haven, landscaped with tall grasses, waterfowl ponds, scenic outlooks, picnic areas and other amenities. A rendering of the potential park is shown on page 12 alongside the new Oakland Touchdown to the new bridge.

#### Environmental Considerations

The project team is committed to completing the project in an environmentally friendly manner by using innovative techniques. Biological mitigation and monitoring are being implemented in accordance with the requirements of the Federal Highway Administration and the various permitting agencies. Biologists have been regularly monitoring the status of water quality, local species of birds, fish, and marine mammals. All weekly, monthly, and annual compliance reports to resource agencies have been delivered on time.

Caltrans is also working with multiple agencies to develop off-site mitigation opportunities for the creation or improvement of habitat in the north and central Bay. The one-year eelgrass pilot program at the North Basin site was completed in July 2006. The monitoring of eelgrass beds will be continued for another year.

Other environmental highlights of 2006 include:

- Installation of cormorant platforms between the two parallel Skyway structures, which will

provide alternative nesting locations for cormorants nesting on the existing bridge;

- Protection of marine habitat by using a curtain of air bubbles to minimize sound waves in the water caused by pile driving;
- Construction of stormwater treatment measures, including bioretention basins to treat runoff from the toll plaza and nearby roadways before it enters the Bay. The work complies with the California Regional Water Quality Control's Discharge Requirement.

#### Project Schedule

The Bay Bridge project is large and complex consisting of multiple contracts. The interdependencies among the major projects are numerous, as shown in the diagram in Appendix B. The Bay Bridge project requires careful monitoring and coordination to assure that construction will be completed on schedule.

A Corridor Schedule Team (CST) has been established whose primary function is to identify and mitigate corridor schedule risks. The CST integrates and coordinates schedules with the project schedule teams, reviews opportunities to enhance the corridor schedule, and provides recommendations to program management regarding schedule decisions and risk mitigation. The CST has helped further the TBPOC's goal of completing the Toll Bridge Program expeditiously by providing recommendation on the contracts throughout the corridor.

The East Span is scheduled to be open to traffic in 2012 in the westbound direction and in 2013 in the eastbound direction. The work sequences of the Bay Bridge West Approach and East Span are provided in Figures 3 and 4, respectively.



Stormwater pump station





# SFOBB West Approach Work Sequence

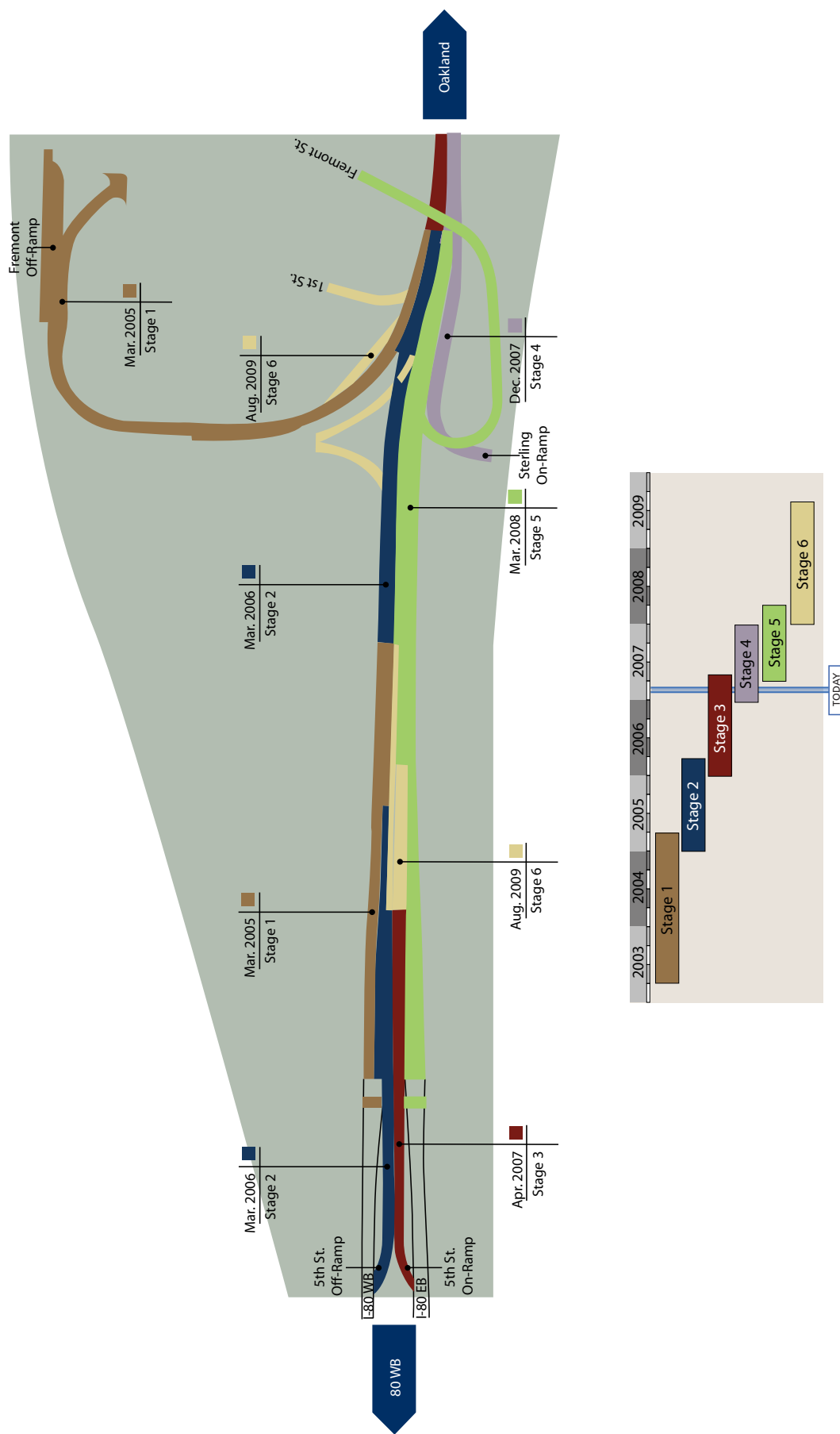


Figure 3. West Approach Schedule

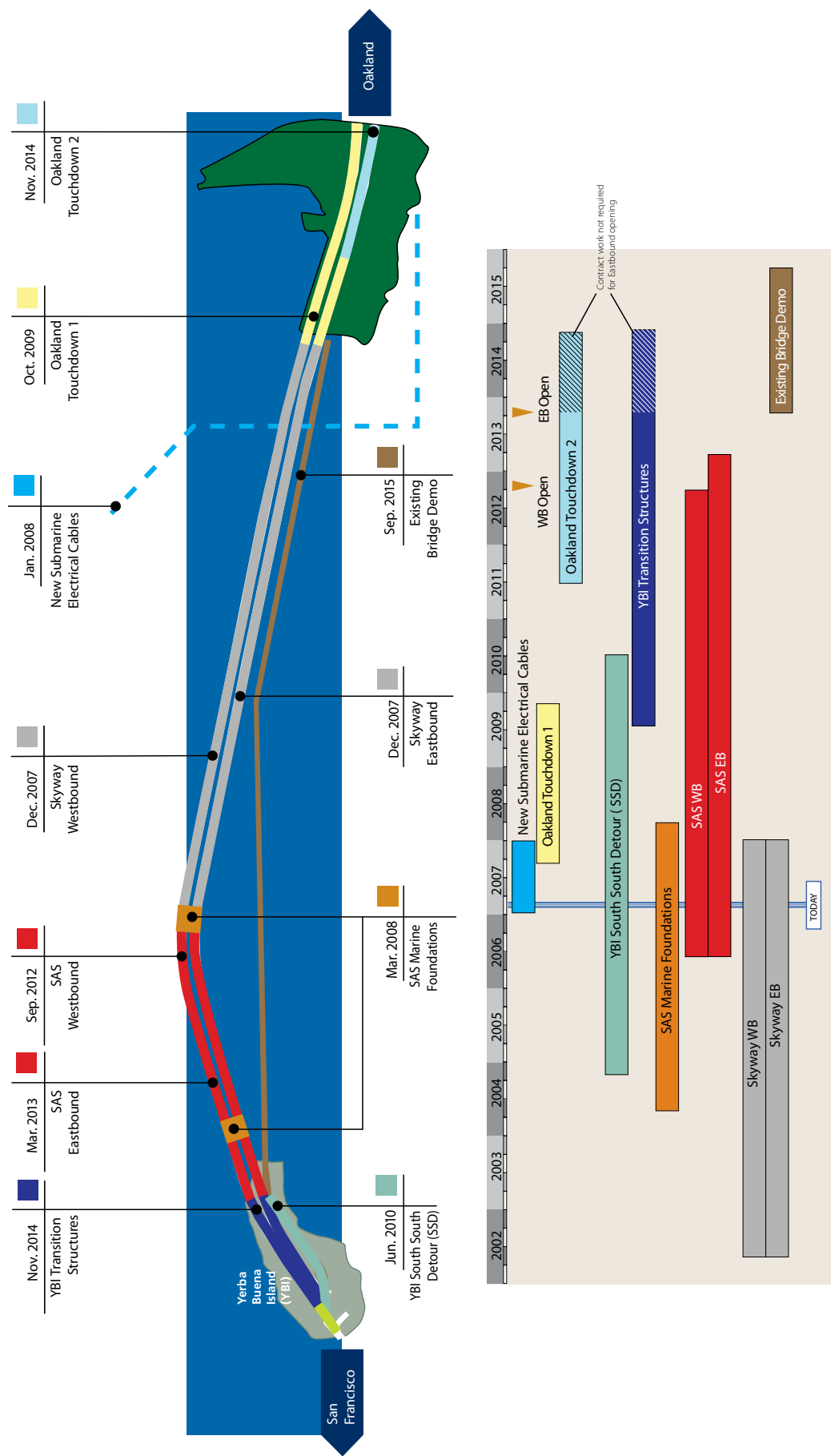
Note: Dates shown above are project completion dates.  
Source: Caltrans, February 2007



TOLL BRIDGE PROGRAM  
OVERSIGHT COMMITTEE

2007 LEGISLATIVE UPDATE

# SFOBB East Span Work Sequence



Note: Dates shown above are project completion dates.  
Source: Caltrans, February 2007

Figure 4: East Span Schedule



TOLL BRIDGE PROGRAM  
OVERSIGHT COMMITTEE

2007 LEGISLATIVE UPDATE



# 2006 YEAR IN REVIEW

January



The first of two steel bridge sections, connecting the Skyway and SAS, arrived on site.

February



An eastbound steel bridge section weighing over 1,700 tons was lifted successfully.

March



The stormwater treatment measures contract was awarded.

April



The SAS contract was awarded to American Bridge/Flour.

May



The last segment of the eastbound Skyway was lifted into place.

June

Demolition of a West Approach segment required weekend closure of the Bay Bridge.



The last segment of the Skyway was cast at the Stockton Pre-Cast Yard.



July

This month marked the one-year anniversary of the passage of AB 144 and the creation of the TBPOC.



TOLL BRIDGE PROGRAM  
OVERSIGHT COMMITTEE

August

A westbound steel bridge section weighing over 1,700 tons was lifted successfully. This was the heaviest lift ever completed by Caltrans, slightly topping the heaviest lift in February.



September

A 1,000-foot section of the West Approach's upper deck was demolished over the Labor Day weekend. The lower deck (eastbound) was closed to traffic.



October

The first footing box for one of the two marine foundations for the SAS was completed.



November

Sixty-foot long hinge pipe beams were installed for additional seismic safety.



December

The last pieces of 452 Skyway segments were installed. The segments averaged 85 feet wide, 25 feet long, and three stories tall.



Photos: Courtesy of Caltrans

Figure 5: 2006 Year In Review



TOLL BRIDGE PROGRAM  
OVERSIGHT COMMITTEE

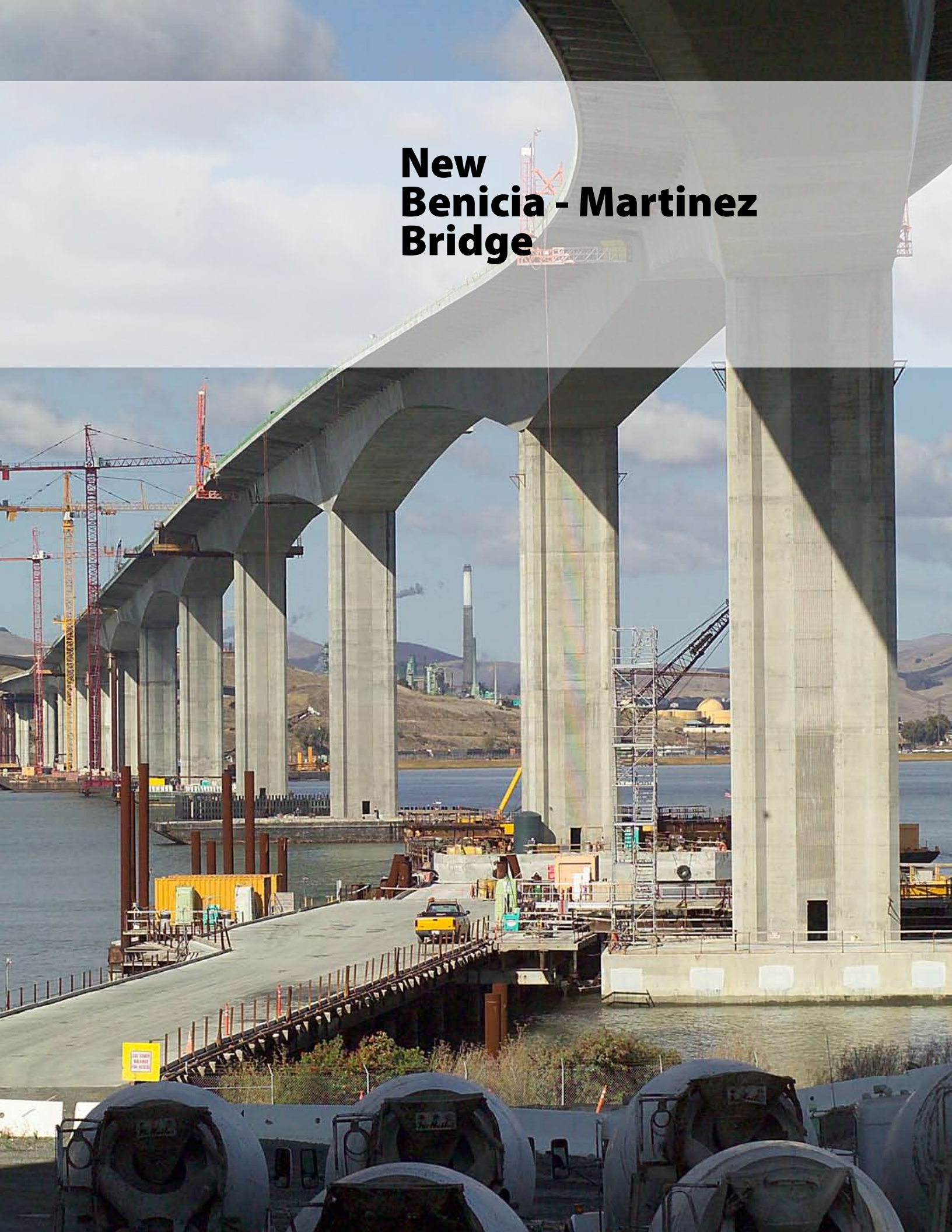
2007 LEGISLATIVE UPDATE

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# New Benicia - Martinez Bridge







New Benicia-Martinez Bridge, Union Pacific Railroad Bridge, Existing Benicia-Martinez Bridge (from left to right)

In 1988, San Francisco Bay Area voters chose to improve regional mobility and reduce congestion with the passage of RM1. Regional Measure 1 authorized a toll increase on all seven of the State-owned toll bridges and funded a package of toll bridge projects, including the construction of a new Benicia-Martinez Bridge. The existing bridge, which was widened in the early 1990s with RM1 funds, provides access across the Carquinez Strait between Contra Costa and Solano counties via Interstate 680, carrying 117,000 vehicles per day.

The new cast-in-place concrete segmental bridge, which is under construction just east of and parallel to the existing span, will carry five lanes of northbound traffic. After the new bridge is open to traffic, the existing bridge will be converted to carry four lanes of southbound traffic and a bicycle/pedestrian pathway. Overall,

## New Benicia - Martinez Bridge

### 2006 Highlights



capacity in the bridge corridor will be increased by 50%. A new plaza and reconstructed interchanges are being built as part of the new bridge project. The new 12-lane toll plaza will feature a carpool bypass lane along with two Fas-Trak open-road tolling express lanes.

In 2006, significant progress was made on the project, including:

- Completion of the reconstruction of the I-680/Marina Vista and I-680/I-780 interchanges; and,
- Completion of the last of 344 cast-in-place concrete bridge segments that form the roadway of the new bridge.





The new bridge and toll plaza are scheduled to be open to traffic by late 2007. Upon opening of the new bridge, work will begin on the reconfiguration of the existing bridge to add the fourth southbound lane and bicycle/pedestrian pathway. The current approved RM1 budget for the project is \$1.3 billion, and the project is forecast to be complete within the approved current budget.



New Benicia-Martinez Bridge under construction





# **Richmond - San Rafael Bridge**







Richmond-San Rafael Bridge

The Richmond-San Rafael Bridge provides an important connection between Marin County and the cities of the East Bay via Interstate 580, carrying 80,000 vehicles per day. The Richmond-San Rafael Bridge seismic retrofit project was completed in 2005, \$89 million under the approved total budget of \$914 million. In October of 2006, the TBPOC authorized the transfer of these cost savings to the Toll Bridge Program's contingency.

One last remaining portion of work for the bridge includes the Richmond-San Rafael Public Access Project, which will provide public access to the Bay shoreline at the west end of the bridge in Marin County. The project, as illustrated in Figure 6, includes a new sidewalk bus-stop landing, a parking area for six cars, a ten-foot wide shoreline

## Richmond - San Rafael Bridge

### 2006 Highlights



trail, pedestrian bridge, picnic tables and benches. New rock slope protection will be placed at the bayshore to minimize erosion, and drought tolerant landscaping will be planted to enhance the overall appearance of the area. The project will also protect salt marsh wetlands and will allow immediate access to the shoreline for motorists, bicyclists, and pedestrians to enjoy walking, picnicking, fishing, and the picturesque views across the Bay. This project was awarded in November 2006. Construction of the project began in January 2007, and is expected to be complete in summer 2007.



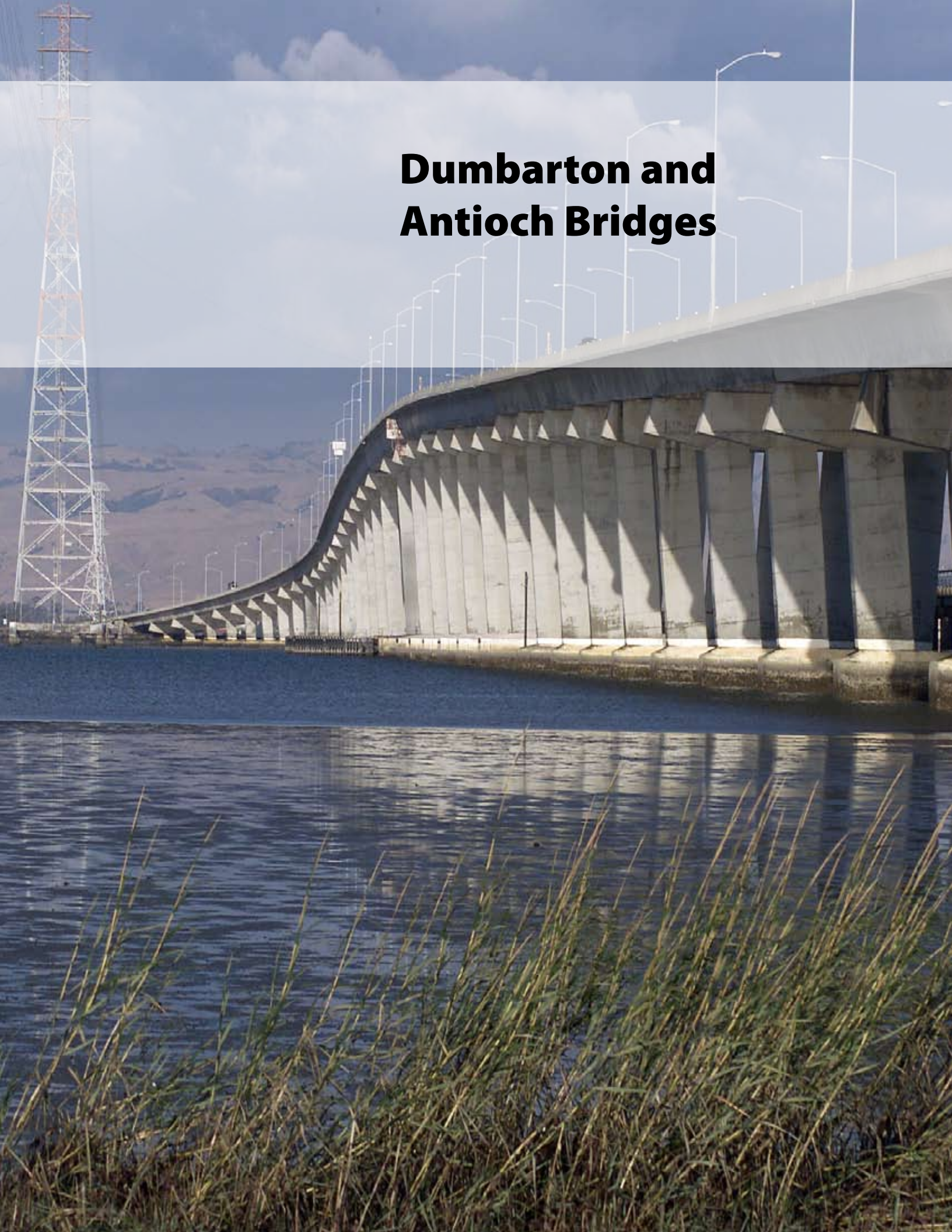


Figure 6: Richmond-San Rafael Bridge Public Access Project





# **Dumbarton and Antioch Bridges**







Antioch Bridge (Dumbarton Bridge on preceding page)

The Dumbarton Bridge provides an important connection between Alameda County and San Mateo County via State Route 84, carrying approximately 78,000 vehicles per day.

The Antioch Bridge spans the San Joaquin River connecting east Contra Costa with the Delta communities of Rio Vista and Lodi via State Route 160, carrying approximately 14,000 vehicles per day.

Due to significant changes in seismic design and evaluation practices, Caltrans initiated a vulnerability study in 2004 for both the Dumbarton and Antioch bridges. The purpose of these studies was to determine whether the bridges would meet current seismic performance standards. The vulnerability study determined that there was

## Dumbarton and Antioch Bridges

### 2006 Highlights



insufficient evidence to determine the performance of the bridges during a large seismic event.

In 2006, the Bay Area Toll Authority issued a contract to Earth Mechanics Inc. (EMI) to provide geotechnical engineering services necessary to advance seismic evaluations of the two bridges.

Once the field-drilling program is completed the new data obtained will be correlated to the existing data that Cal-





trans has for each bridge. The new data will also be used to help the designers produce the models for how each structure will behave during a seismic event.

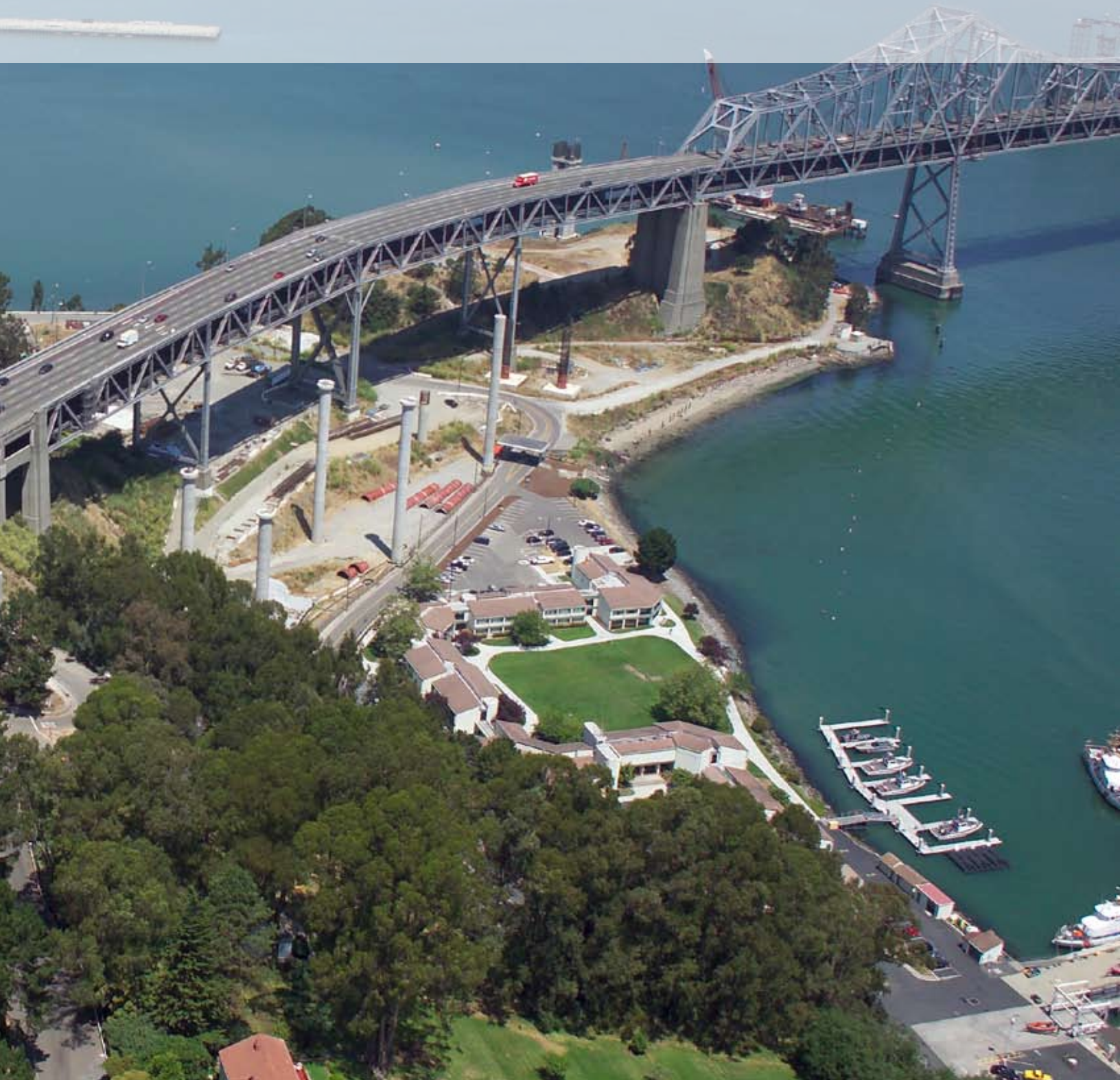
In parallel with the ongoing fieldwork, EMI and their associates have begun developing the seismic design motions for both bridges. Extensive efforts are being made to take proper advantage of the best seismological information available. Peer review of the motions by the Toll Bridge Seismic Safety Peer Review Panel has been initiated.



Drilling vessel, Quin Delta, at Antioch Bridge



# 2007 Look Ahead







W3 Column on Yerba Buena Island

The year 2007 presents new challenges as well as several new milestones. The TBPOC continues to oversee work towards completing the Toll Bridge Program. The Risk Management and Corridor Schedule Teams will continue their coordination to identify and address schedule and cost impacts to keep projects on schedule. Many of the upcoming projects will require significant public outreach, as they impact traffic and nearby residents and businesses.

The following section provides a snapshot of what to expect this year.

### **SAN FRANCISCO - OAKLAND BAY BRIDGE Project Activities**

A multitude of diverse construction related activities for the Bay Bridge will

## **2007 Look Ahead**

- *SAS Marine Foundation Completion and Steel Fabrication Startup for SAS Tower*
- *East Span West Tie-In over Three-Day Closure*
- *Oakland Touchdown Work Gets Underway*
- *Skyway Completion and Stormwater Measures Completion*
- *Benicia - Martinez Bridge Completion*
- *Major Traffic Shift onto West Approach Temporary Eastbound Bypass*

continue in the year 2007. Major activities will include continued progress on the SAS, especially marine foundations and commencement of steel fabrication. Work will progress on the South South Detour contract, in particular the construction of the West Tie-In Phase 1. The first phase of the West Tie-In is a retrofit-by-replacement for a 300-foot segment of the western most part of the existing East Span. Completion of the WTI Phase 1 requires a full bridge closure over a three-day weekend to allow for the removal and replacement of the 300-foot upper deck segment.



The closure will be modeled after the successful public outreach and transit agency coordination executed for the Labor Day weekend closure in 2006.

Work will also commence on the Oakland Touchdown, including both the electrical cable and the foundations for both eastbound and westbound segments. Lastly, the Skyway and stormwater measures contract will be completed in 2007.

In spring 2007, the eastbound traffic on the West Approach will be detoured onto a temporary structure for approximately one year. The switch will occur during weekend night hours, thereby minimizing potential traffic disruption. While traffic is detoured onto the temporary structure, the remaining mainline structure will be demolished and replaced.

#### Public Outreach

The Public Information Office team will continue to implement the approved Communications Plan, which guides community outreach activities. Major activities for 2007 may include:

- Wide-scale public outreach campaign to support the three-day full bridge closure necessary for the first phase of the YBI West Tie-In replacement on the South South Detour;
- Media and neighborhood outreach campaign during the West Approach eastbound traffic realignment and deck demolition;
- Media coverage and events, as appropriate, for the completion of the Skyway and SAS marine foundations, and construction of the SAS span;
- Regular updates about the ongoing Bay Bridge Seismic Safety Projects, including the SAS, the Stormwater Treatment Project, and the Oakland Touchdown;
- Establishment of a Public Information Office on Treasure Island and continued development of a partnership with the Treasure Island Development Authority;

continued development of the Pier 7 Visitor Center; and, continued tours and presentations;

- Ongoing updates about the Bay Bridge Seismic Safety Projects to media, industry, local communities, motorists and the general public, including the publication of outreach materials, such as the Bay Bridge News and E-Alerts.

#### NEW BENICIA-MARTINEZ BRIDGE

After five years of construction, the new Benicia-Martinez Bridge is scheduled to be open to traffic by December 2007.

#### RICHMOND-SAN RAFAEL BRIDGE

Construction of the Public Access Project began in January 2007, and is scheduled to be complete in summer 2007.

#### DUMBARTON AND ANTIOCH BRIDGES

In January 2007, Caltrans officially began the structures design effort that will generate the seismic retrofit strategies for each bridge. The design teams are in the early stages of the work, which is being carried out in their Sacramento offices. Engineers are currently working on material and cross-section properties, numerous bridge connection

details, local and global geometries, and foundation behaviors. Caltrans designers will conduct structural analyses and complete the development of retrofit strategies for both bridges by early 2009.

#### TOLL BRIDGE PROGRAM

##### Small Business Program

In December 2006, the Toll Bridge Program embarked on the development of the Small Business Program. This unique training and outreach program is being designed to enhance small business expertise, assist with resource identification, grow existing businesses, and identify opportunities for contract work on the Bay Bridge projects.

The program will offer a series of professional development courses that will be taught by industry experts, and address a range of topics, including marketing strategies, business systems and cutting edge technologies, that will provide real world expertise and the competitive edge for small and emerging businesses in the market place.

The Small Business Education and Training Program will experience a full program ramp-up in spring 2007.



New Benicia-Martinez Bridge scheduled to open in 2007







## Appendix

# Appendix A

**Table 1: Toll Bridge Program Funding**  
(as of December 31, 2006)

	Budgeted	Funding Available & Contributions (In \$Millions)
<b>Toll Financing</b>		
Seismic Surcharge Revenue AB 1171	\$ 2,282.0	\$ 2,282.0
Seismic Surcharge Revenue AB 144	\$ 2,150.0	\$ 2,150.0
BATA Consolidation	\$ 820.0	\$ 820.0
Subtotal - Financing	\$ 5,252.0	\$ 5,252.0
<b>Direct Contribution</b>		
Proposition 192	\$ 790.0	\$ 789.0
San Diego Coronado Toll Bridge Revenue Fund	\$ 33.0	\$ 33.0
Vincent Thomas Bridge	\$ 15.0	\$ 6.9
State Highway Account	\$ 745.0	\$ 745.0
Public Transportation Account	\$ 130.0	\$ 90.0
ITIP/SHOPP/Federal Contingency	\$ 448.0	-
Federal Highway Bridge Replacement and Rehabilitation (HBRR)	\$ 642.0	\$ 500.0
SHA – East Span Demolition	\$ 300.0	-
SHA – “Efficiency Savings”	\$ 130.0	\$ 2.0
Redirect Spillover	\$ 125.0	-
Motor Vehicle Account	\$ 75.0	\$ 75.0
Subtotal - Contributions	\$ 3,433.0	\$ 2,240.9
<b>Total Funding</b>	<b>\$ 8,685.0</b>	<b>\$ 7,492.9</b>
<b>Allocated to Date</b>		<b>\$ 6,013.3</b>
<b>Remaining Unallocated</b>		<b>\$ 1,479.6</b>

Source: Toll Bridge Seismic Retrofit Program Fourth Quarter Report, as of December 31, 2006, Toll Bridge Program Oversight Committee.





**Table 2: Toll Bridge Program Approved Budget**  
( as of December 31, 2006)

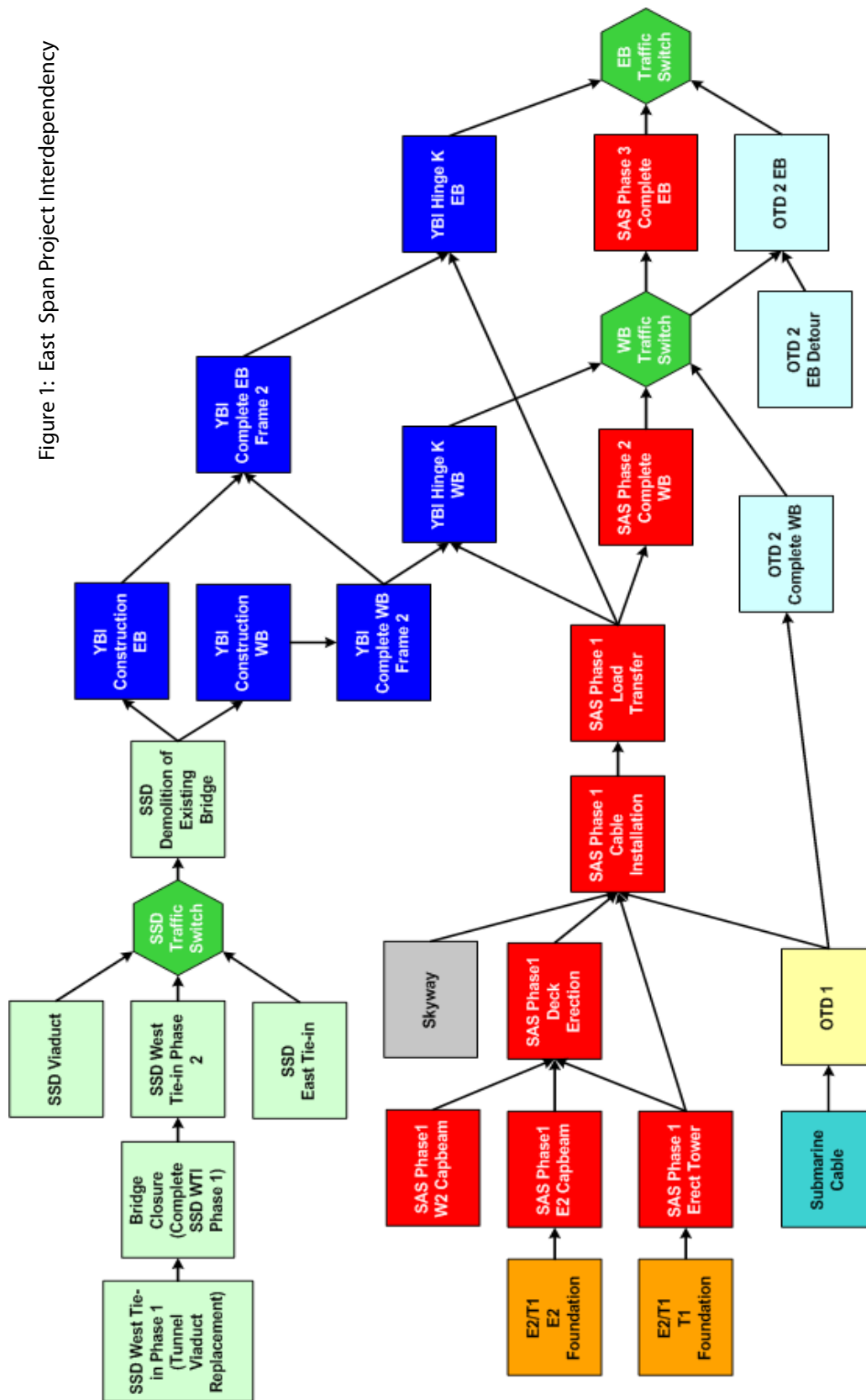
Contracts	Current Approved Budget (in \$ Millions)	4th Quarter 2006 Forecast
<b>Completed Projects</b>		
Benicia-Martinez	\$177.8	\$177.8
Carquinez	\$114.2	\$114.2
San Mateo-Hayward	\$163.5	\$163.5
Vincent Thomas	\$58.5	\$58.5
San Diego-Coronado	\$103.5	\$103.5
SFOBB West Span	\$307.9	\$307.9
<b>Ongoing Projects</b>		
Richmond-San Rafael	\$825.0	\$825.0
SFOBB West Approach	\$429.0	\$429.0
SFOBB East Span	\$5,486.6	5,534.9
Miscellaneous Program Costs	\$30.0	\$30.0
Subtotal	\$7,696.0	\$7,744.3
Program Contingency	\$989.0	\$940.7
<b>Total Program</b>	<b>\$8,685.0</b>	<b>\$8,685.0</b>

Source: Toll Bridge Seismic Retrofit Program Fourth Quarter Report, as of December 31, 2006, Toll Bridge Program Oversight Committee.



# Appendix B

Figure 1: East Span Project Interdependency





**Photographers:**

Bob Colin  
Bill Hall  
John Huseby  
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Effie Millionis  
Ivy Morrison  
Mika Miyasato  
Bart Ney  
Paul Segal  
Camille Tsao  
Dennis Turchon

**Production:**

Legislative Update produced by HNTB, in cooperation with Circlepoint.

Special thanks to the prime contractors and designers  
who are responsible for the difficult task of designing  
and building the projects that are highlighted in  
this report:

Designers - T.Y. Lin International/Moffatt Nichol Engineers (a joint venture), PB

West Approach – Tutor-Saliba Corporation

South South Detour - C.C. Myers

SAS- ABF, a joint venture consisting of the American Bridge Company and Fluor Inc.

E2/T1 and Skyway – KFM, a joint venture of Kiewit Pacific, FCI Constructors, and Manson Construction

OTD Submarine Electrical Cable Relocation – Manson Construction

Stormwater Control Measures – Diablo Construction

New Benicia–Martinez Bridge – Kiewit Pacific

I-680/I-780 Interchange - C.C. Myers

I-680/Marina Vista Interchange - FCI Constructors





# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS   BAY AREA TOLL AUTHORITY   CALIFORNIA TRANSPORTATION COMMISSION



**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** February 12, 2007

**FR:** Andrew Fremier, BATA Deputy Executive Director

**RE:** Agenda No. - 4d  
Program Issues  
Item- Dumbarton/Antioch Bridge Update

---

**RECOMMENDATION:**

For information only

**COST:**

\$17.8 M

**SCHEDULE IMPACTS:**

Not Applicable. The Dumbarton and Antioch Bridges are not currently covered in the Toll Bridge Seismic Retrofit Program. As such, they would not affect any of the on-going work in the program.

**DISCUSSION:**

At the TBPOC meeting on May 31, 2006, the Department and BATA gave a status update on the Dumbarton and Antioch bridges. Subsequent to the May TBPOC update the following has been accomplished:

- Final Value Analysis Study Report for the Geotechnical Investigation was issued on July, 24 2006.
- Contract between BATA and Earth Mechanics Inc. (EMI) to complete the Geotechnical Investigation and Analysis was entered into on September 26, 2006. Contract is task order based, and not to exceed \$7 M.
- In January 2007 Caltrans identified two separate design teams to begin the design work on each bridge. Caltrans estimates the total cost to get to strategies for both bridges to be \$10.8 M.

The field-drilling program began on November 6, 2006. EMI has completed 90% of on-land operation at both Dumbarton and Antioch Bridge. The remaining on-land investigation will be completed in March or April 2007 (partly due to ground conditions and partly due the fact that Seismic Peer Review may recommend some special field tests

be conducted). The marine field investigation began at the Dumbarton Bridge on December 12, 2006 and was completed on January 26, 2007. The marine field investigation began at the Antioch Bridge on January 30, 2007 and is currently scheduled for completion on February 16, 2007.

Once the field-drilling program is completed the data obtained will be correlated to the existing data that Caltrans has for each bridge, as well as, other geotechnical data that is available for this area from other on-going projects. This data will also be used to help the designers produce the models for how each structure will behave during a seismic event.

In parallel with the ongoing fieldwork, EMI and their associates have begun developing the seismic design motions for both bridges. A portion of the seismic design motions includes the development of rock motions, which should be completed by April 2007. Extensive efforts are being made to take proper advantage of the best seismological information available. Peer review of the motions by the Toll Bridge Seismic Safety Peer Review Panel has been initiated.

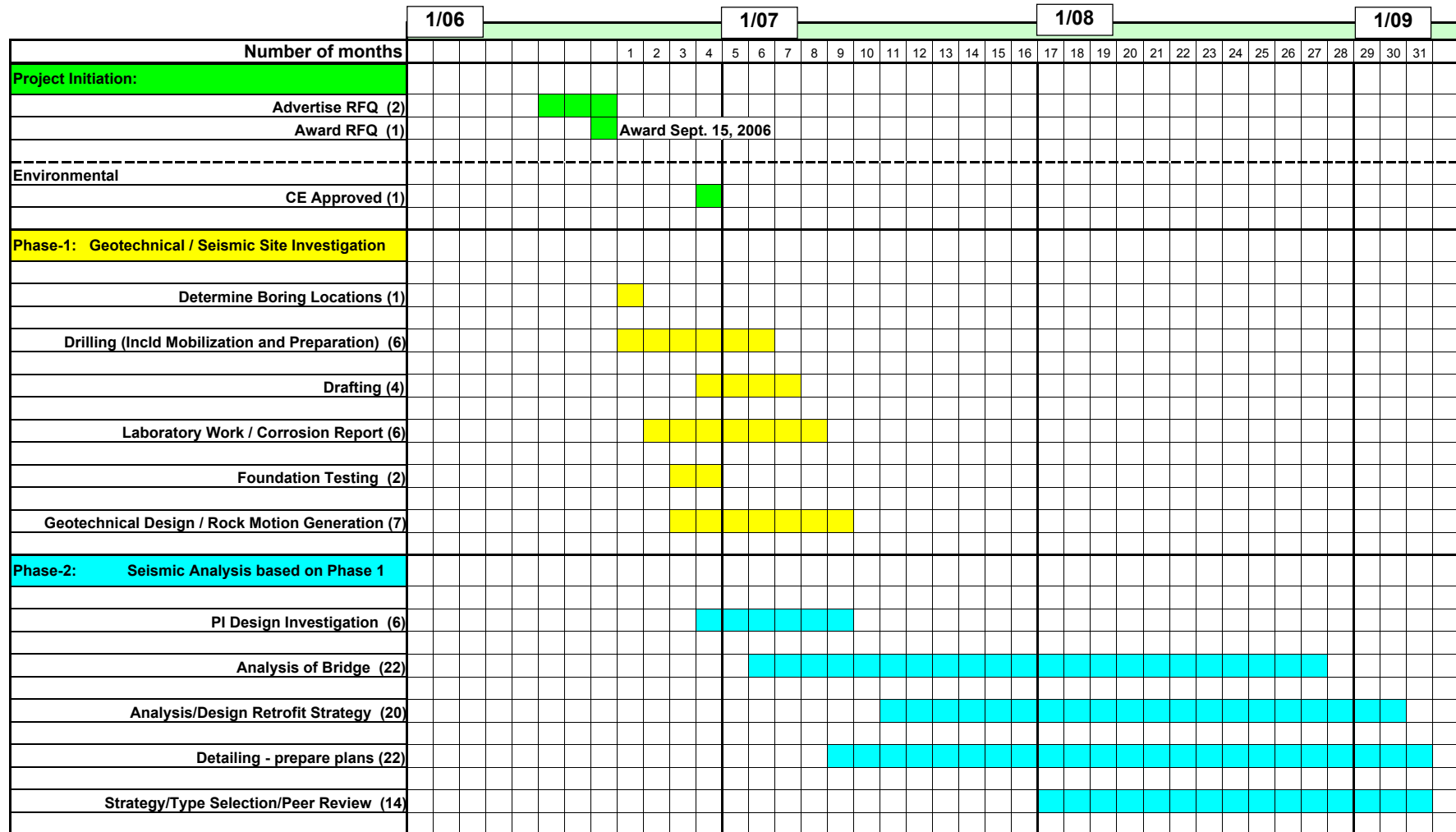
In January 2007, Caltrans officially began the structures design effort that will generate the seismic retrofit strategies for each bridge. Lead designers have been identified and they are working with their assigned teams. The teams are in the early stages of the work, which is being carried out in their Sacramento offices. Engineers are currently working on material and cross-section properties, numerous bridge connection details, local and global geometries, and foundation behaviors. Caltrans' designers will conduct structural analyses and complete the development of retrofit strategies for both bridges by early 2009.

**Attachment(s):**

- 1) Antioch Schedule to Retrofit Strategy
- 2) Dumbarton Schedule to Retrofit Strategy



# Dumbarton Seismic Retrofit - Time Duration up to Retrofit Strategy



## Phase 2 Assumptions:

- 1-All Geotechnical information needed within 6 months from start of design. This info includes P-Y'S, T-Z'S, Q-Z'S, response spectra curves, multi-support excitation for time histories, etc.
- 2-Two separate teams of Engineers will work at the same time on the project. Team A from Design West will consist of 4 Engineers and Team B from EEQ of 2-4 engineers.
- 3- All permits needed for the retrofit including main channel encroachment shall be obtained by the district in timely manner.
- 4- Seismic Performance Criteria per MTD 20-1 shall be established by the district prior to start of retrofit design.

# Antioch Seismic Retrofit - Time Duration up to Retrofit Strategy

	1/06				1/07							1/08							1/09																
Number of months					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Project Initiation:																																			
Advertise RFQ (2)																																			
Award RFQ (1)																																			
	Award Sept. 15, 2006																																		
Environmental																																			
CE Approved (1)																																			
Phase-1: Geotechnical / Seismic Site Investigation																																			
Determine Boring Locations (1)																																			
Drilling (Incl'd Mobilization and Preparation) (6)																																			
Drafting (4)																																			
Laboratory Work / Corrosion Report (6)																																			
Foundation Testing (2)																																			
Geotechnical Design / Rock Motion Generation (7)																																			
Phase-2: Seismic Analysis based on Phase 1																																			
PI Design Investigation (6)																																			
Analysis of Bridge (22)																																			
Analysis/Design Retrofit Strategy (20)																																			
Detailing - prepare plans (22)																																			
Strategy/Type Selection/Peer Review (14)																																			

## Phase 2 Assumptions:

- 1-All Geotechnical information needed within 6 months from start of design. This info includes P-Y'S, T-Z'S, Q-Z'S, response spectra curves, multi-support excitation for time histories, etc.
- 2-Two separate teams of Engineers will work at the same time on the project. Team A from Design West will consist of 4 Engineers and Team B from EEQ of 2-4 engineers.
- 3- All permits needed for the retrofit including main channel encroachment shall be obtained by the district in timely manner.
- 4- Seismic Performance Criteria per MTD 20-1 shall be established by the district prior to start of retrofit design.



**Item 5: San Francisco-Oakland Bay Bridge  
Updates**

## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** February 12, 2007

**FR:** Tony Anziano, Toll Bridge Program Manager, Caltrans

**RE:** Agenda No. - 5a, 1

Item- San Francisco-Oakland Bay Bridge Updates  
West Approach: Update of CCO 149 – Realignment of ST6D,  
Stage 5 Detour

---

### **RECOMMENDATION:**

Approval of CCO 149

### **COST:**

\$2.85 million

### **DISCUSSION**

#### **Background**

On December 21, 2006, the TBPOC approved proceeding with the Department's negotiation of Contract Change Order (CCO) No. 149, realignment of ST6D, stage 5 detour, not to exceed \$6 million. CCO No. 149 will eliminate the need to construct the Interim First Street and Essex Street on-ramps by realigning the last 300 feet of the ST6D detour. The presentation in December included a 3-D animation presentation comparing the as-planned vs. CCO 149 alignment options cost and traffic impacts.

Once the "approval to negotiate" was granted by the TBPOC, costs were finalized with the contractor, Tutor-Saliba. Dollars were within the range granted by the TBPOC and generally consistent with the BAMC independent review report.

This item is returning to the TBPOC for approval of the CCO. The CCO and CCO Memorandum are attached. The negotiated amount for CCO work is \$2.85 million, within the amount authorized by the TBPOC. However, it should be noted that this item will return to the TBPOC for approval of a supplement as final design of staging is not finalized. It is necessary to move forward with approval of the CCO with respect to the elements that have been finalized so the Contractor can proceed with identified material and equipment needs.

The items included in this CCO are listed in the attached CCO. The items excluded at this time but subject to addition in the future by supplement to the CCO are also listed in both the attached CCO (page 3) and CCO Memorandum. The excluded items are currently estimated to have a cost of approximately \$1.2 million, bringing the ultimate total cost of the CCO to approximately, \$4.05



## *Memorandum*

million, still within the amount authorized by the TBPOC in December 2006. This CCO does not include adjustments for time. As previously addressed by the TBPOC, there are time related issues that will be discussed in the future.

The field work associated with this Change will begin this month.

**Attachment(s):**

- 1) Final Contract Change Order 149 Memorandum
- 2) CCO 149 and Attachments
- 3) Graphic – West Approach (EA 04-0435V4) Realignment of ST6D Stage 5 Detour
- 4) West Approach Budget Balance Beam, January 4, 2007

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**CONTRACT CHANGE ORDER MEMORANDUM**

DATE: 4/1/2006 Page 1 of 3

TO: Mike Forner / Dennis Turchon		FILE: E.A. 04 - 0435V4	
FROM: Deanna Vilcheck		CO-RTE-PM SF-80-4.9/5.9	
FED. NO.			
CCO#: 149	SUPPLEMENT#: 0	Category Code: CHTC	CONTINGENCY BALANCE (incl. this change) \$3,093,573.17
COST: \$2,850,639.60	INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>	HEADQUARTERS APPROVAL REQUIRED?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
SUPPLEMENTAL FUNDS PROVIDED: \$0.00		IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
CCO DESCRIPTION: Realignment of Interim Eastbound Detour		PROJECT DESCRIPTION: SEISMIC RETROFIT	
Original Contract Time: 1824 Day(s)	Time Adj. This Change: DEF Day(s)	Previously Approved CCO Time Adjustments: 52 Day(s)	Percentage Time Adjusted: (including this change) 3 %
			Total # of Unreconciled Deferred Time CCO(s): (including this change) 0

**THIS CHANGE ORDER PROVIDES FOR:**

The realignment of the Interim Eastbound Stage 5 Detour (ST6D Line) in order to eliminate the Interim First Street and Essex Street On-Ramps.

Stage 5 of the contract Staging Plans call for Eastbound I-80 (EB80) traffic to be placed on the ST6D detour which carries eastbound traffic to the north of the existing freeway and allows for the demolition and reconstruction of the southern portions of Frames 5U through 7U. This detour alignment, however, carries EB80 traffic over the existing First and Essex St. On-ramps which provide the major access to EB80 from downtown San Francisco. In order to avoid the closure of these ramps, the contract calls for the construction of the Interim First St. and Essex St. On-ramps. These ramps are scheduled to be in use for over one year during Stage 5 construction.

Change Order No. 149 will eliminate the need to construct the Interim First and Essex On-ramps by realigning the last 300 feet of the ST6D detour.

The construction of these two interim ramps presents significant constructability issues. The major issue concerns the construction of the western most 300 feet of the ramps. In this area, the ramps have to be constructed immediately adjacent to and directly over the existing ramps. This staging conflict wasn't addressed in the contract plans. The best case scenario is that the work can be completed using two weekend ramp closures. The worst case scenario would be that the work could not be performed in the maximum allowable weekend closure period. This would result in a non-constructable scenario that would mandate the realignment of the ST6D detour proposed under this request.

The staging plans require the interim ramps to be open prior to the beginning of Stage 5 when the traffic is switched to the ST6D detour and show the eastern portion of both ramps being constructed in an earlier stage. Constructing the western portion of the ramps, where they conflict with the existing First Street and Essex Street On-ramps is not accounted for. If the ramps are to be constructed, this portion of the work would have to be staged over two separate weekend ramp closures.

The work concerning the potential weekend construction of the Interim First Street On-ramp would entail the following sequence of work for the 300 lineal foot western portion of the ramp:

- 1) Close the existing First Street On-ramp
- 2) Build the first half of the approximately 10 foot high embankment
- 3) Grade / Form / Pour / Cure the Type 60C concrete barrier
- 4) Construct the second half of the 10 foot embankment
- 5) Grade / Form / Pour / Cure the Type 60B concrete barrier
- 6) Construct subgrade and place aggregate base and asphalt concrete section
- 7) Place pavement delineation
- 8) Open the Interim First Street On-ramp

A similar schedule would be required on a following weekend for the construction of the Interim Essex Street On-ramp and then again during Stage 6 when the interim ramps are removed.

After completing construction of the interim ramps, the eastern most 300 lineal feet of the ST6D detour will have to be constructed (placing embankment, roadway section and barriers) as its alignment carries it over the existing on-ramps. Again



**CONTRACT CHANGE ORDER MEMORANDUM**

this conflict isn't accounted for in the staging plans.

Based on the October CPM update, the construction of the interim ramps is the controlling operation on the project. The staging and constructability issues discussed would potentially delay the project by 2 to 4 months. This delay, however, could be mitigated by a temporary realignment of the Interim Eastbound Detour that removes the interim ramp construction from the controlling operation. This realignment would cost approximately \$350,000.

Constructing the interim ramps would also result in added cost to the Department due to the conflicts discussed and the required weekend construction mandate. Added costs would include mobilizations, premium time labor, traffic control, shoring and inefficiencies. These costs are estimated at within a range of \$1,000,000 to \$2,000,000. Additional costs related to public outreach, COZEED and potential extended BART operations are estimated at \$50,000 to \$550,000 (See attached estimate). The total risk to the Department under the assumption that the ramps can be constructed during a weekend closure is estimated at \$1,400,000 to \$2,900,000.

Providing the traffic opening under Frame 7U and the eastern most portion of Frame 6U will also provide a significant savings to the project concerning Change Order No. 161. This change order calls for the construction of an interim detour for the Sterling Street On-Ramp which realigns the ramp to travel under Frame 6U and 7U and tie into the falsework opening being provided for the realigned ST6D detour under this change order. Without this traffic opening, the interim Sterling St. ramp would require a separate falsework opening over the entire length of the ramp under Frame 6U and 7U. The costs for providing this opening, without tying into the traffic opening proposed under this change order, is estimated at \$1,500,000 to \$2,500,000.

Based on the above estimates, the costs of not implementing Change Order No. 149 are estimated between the range of \$3,100,000 and \$5,600,000. Based on these sizable risks and the constructability issue, the District is proposing to eliminate the need for the interim on-ramps by realigning the ST6D detour. The realignment will eliminate the conflict with the detour and the existing First and Essex on-ramps by bringing the detour back onto the existing EB80 alignment 300 feet earlier than the planned detour alignment.

This issue was presented to the Toll Bridge Program Oversight Committee (TBPOC) on December 22, 2006 and the Committee authorized the District to negotiate with the contractor at a cost not to exceed \$6,000,000.

These negotiations have now been finalized and the District is seeking authority to issue and approve the change order based on the tentative agreement reached. The major costs will result from added falsework openings and extended falsework spans necessary to provide for the EB80 traffic under Frame 6U and 7U and contractor inefficiencies incurred due to the traffic being present in the Frame 7U work area in lieu of the contractor having full access to the area. Costs associated with modifying the Frame 7U temporary supports will also be incurred along with significant additional traffic control costs.

The elimination of the Interim First and Essex Street On-Ramps and the changes to the realigned ST6D detour shall be compensated by increasing and decreasing to the appropriate contract item at contract prices for a net savings of \$769,340.40. A credit to the State for the reduced demolition work concerning the portion of the interim ramps that will not be constructed shall be provided as an adjustment of compensation at an agreed lump sum of \$105,000.00 representing a total cost savings of \$874,340.40.

The additional costs resulting from providing the falsework opening under Frames 6U and 7U, working over traffic and modifying the temporary supports, shall be paid as an adjustment of compensation at an agreed lump sum of \$3,404,980.00. All traffic closures of the eastbound 80 mainline necessary for the work of this change shall be paid as an adjustment of compensation at an agreed unit price at an estimated cost of \$320,000.00. The total change order cost of \$2,850,639.60 shall be financed from the contract's contingency fund. A cost analysis is on file.

Costs concerning the revised stage construction of the eastbound roadway necessitated due to this change shall be addressed under a supplemental change order as the exact scope of work and sequencing won't be determined until the work has sufficiently progressed. Costs associated with any additional asphalt concrete paving at the eastern detour conform and costs associated with the added temporary support at the Bent 19U end diaphragm are also deferred pending the final design of this work. The total costs of these deferred items of work shall not exceed \$1,250,000.

Adjustment of contract time is deferred as this work may affect the controlling operation. It is currently anticipated that there will be no delay to the project due to this change.

Maintenance concurrence is not required as the realigned detour doesn't affect any permanent roadway features.

**CONTRACT CHANGE ORDER MEMORANDUM**

EA: 0435V4 CCO: 149 - 0

DATE: 4/1/2006

Page 3 of 3

<b>CONCURRED BY:</b>			<b>ESTIMATE OF COST</b>		
Construction Engineer:	D. Vilcheck <i>UV</i>	Date <i>2/2/07</i>		THIS REQUEST	TOTAL TO DATE
Bridge Engineer:	W. Basha <i>WB</i>	Date <i>2/2/07</i>	ITEMS	(\$769,340.40)	(\$769,340.40)
Project Engineer:	A. Melkonians	Date 1/25/07	FORCE ACCOUNT	\$0.00	\$0.00
Project Manager:	K. Terpstra - Project Manager	Date 1/25/07	AGREED PRICE	\$0.00	\$0.00
FHWA Rep.:		Date	ADJUSTMENT	\$3,619,980.00	\$3,619,980.00
Environmental:		Date	<b>TOTAL</b>	<b>\$2,850,639.60</b>	<b>\$2,850,639.60</b>
Other (specify):	Sr. Design Engr OSD:G. Setberg	Date 1/31/07	<b>FEDERAL PARTICIPATION</b>		
Other (specify):		Date	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING		
District Prior Approval By:		Date	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)		
HQ (Issue Approve) By:	Ken Darby	Date 1/16/07	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS		
Resident Engineer's Signature:	<i>Deanne Vilcheck</i>	Date <i>2/2/07</i>	FEDERAL FUNDING SOURCE    PERCENT		



**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

CCO: 149 Suppl. No. 0 Contract No. 04 - 0435V4 Road SF-80-4.9/5.9

FED. AID LOC.:

**To: TUTOR-SALIBA CORP**

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Implement the following changes concerning Stage 5 of the contract's stage construction plans:

- 1) Eliminate the construction and utilization of the Interim First Street (FRT Line) and Interim Essex Street (EST Line) On-Ramps.
- 2) Realign the Interim Eastbound Detour (ST6D Line) as shown on Pages No. 4 and 5 of this change order.
- 3) Modify the specified temporary support loads and locations for Bents 19U through 23U Mainline, Bridge No. 34-0126R/L, as shown on sheets 6 through 10 of this change order, plan sheets No. 1011R2, 971R2, 975R3, 985R3 and 989R2.

**Estimate of Increase in Contract Item at Contract Price:**

Item No. 33: TEMPORARY RAILING (TYPE K)					
1100 LF	( +3.56%)	@	\$19.00 /LF	=	+\$20,900.00 ( +2.30%)
Item No. 35: TEMPORARY TRAFFIC SCREEN					
1100 LF	( +3.77%)	@	\$4.70 /LF	=	+\$5,170.00 ( +0.62%)

Estimated total cost for Increase in Contract Item.....\$26,070.00

**Estimate of Decrease in Contract Item at Contract Price:**

Item No. 34: TEMPORARY CRASH CUSHION MODULE					
-11 EA	( -1.77%)	@	\$266.00 /EA	=	-\$2,926.00 ( -22.10%)
Item No. 54: PLANE ASPHALT CONCRETE PAVEMENT					
-370 SQYD	( -1.34%)	@	\$8.20 /SQYD	=	-\$3,034.00 ( -3.86%)
Item No. 56: REMOVE CONCRETE BARRIER					
-1733 LF	( -28.41%)	@	\$10.00 /LF	=	-\$17,330.00 ( -27.80%)
Item No. 81: ROADWAY EXCAVATION (TYPE NRH)					
-824 CY	( -8.88%)	@	\$86.60 /CY	=	-\$71,358.40 ( +2.01%)
Item No. 82: ROADWAY EXCAVATION (TYPE RH)					
-50 CY	( -5.00%)	@	\$280.00 /CY	=	-\$14,000.00 ( -5.00%)
Item No. 83: ROADWAY EXCAVATION (DETOUR REMOVAL)					
-1807 CY	( -38.12%)	@	\$37.00 /CY	=	-\$66,859.00 ( -38.12%)
Item No. 92: (F) STRUCTURE EXCAVATION TYPE RH					
-22 CY	( -13.92%)	@	\$1,050.00 /CY	=	-\$23,100.00 ( -7.47%)
Item No. 102: (F) STRUCTURE BACKFILL (BRIDGE)					
-40 CY	( -0.77%)	@	\$95.00 /CY	=	-\$3,800.00 ( -2.15%)
Item No. 112: IMPORTED BORROW					
-1807 CY	( -26.93%)	@	\$16.00 /CY	=	-\$28,912.00 ( -6.17%)
Item No. 127: CLASS 4 AGGREGATE SUBBASE					
-380 CY	( -4.88%)	@	\$44.00 /CY	=	-\$16,720.00 ( -3.68%)
Item No. 130: ASPHALT CONCRETE (TYPE A)					
-1767 TON	( -8.81%)	@	\$81.00 /TON	=	-\$143,127.00 ( +5.59%)
Item No. 172: (F) STRUCTURAL CONCRETE BRIDGE					
-480 CY	( -0.69%)	@	\$378.00 /CY	=	-\$181,440.00 ( -0.77%)

**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

CCO: 149 Suppl. No. 0 Contract No. 04 - 0435V4 Road SF-80-4.9/5.9

FED. AID LOC.:

Item No. 184: DRILL AND BOND DOWEL						
-143 LF	( -0.99% )	@	\$10.00 /LF	=	-\$1,430.00	( -1.06% )
Item No. 203: JOINT SEAL (MR = 1")						
-126 LF	( -50.81% )	@	\$28.00 /LF	=	-\$3,528.00	( -50.81% )
Item No. 216: (F) BAR REINFORCING STEEL (BRIDGE)						
-129882 LB	( -0.41% )	@	\$0.50 /LB	=	-\$64,941.00	( -0.01% )
Item No. 253: (F) MISCELLANEOUS METAL (BRIDGE)						
-714 LB	( -0.12% )	@	\$3.50 /LB	=	-\$2,499.00	( -0.15% )
Item No. 268: CONCRETE BARRIER (TYPE 60)						
-1559 LF	( -36.09% )	@	\$55.00 /LF	=	-\$85,745.00	( -38.52% )
Item No. 270: CONCRETE BARRIER (TYPE 60C)						
-174 LF	( -10.04% )	@	\$52.00 /LF	=	-\$9,048.00	( +2.02% )
Item No. 271: (F) CONCRETE BARRIER (TYPE 60D)						
-276 LF	( -71.50% )	@	\$18.00 /LF	=	-\$4,968.00	( -58.29% )
Item No. 273: (F) CONCRETE BARRIER (TYPE 732 MOD)						
-860 LF	( -3.36% )	@	\$55.00 /LF	=	-\$47,300.00	( -3.32% )
Item No. 303: REFINISH BRIDGE DECK						
-223 SQFT	( -26.74% )	@	\$15.00 /SQFT	=	-\$3,345.00	( -26.74% )

Estimated total cost for Decrease in Contract Item.....(\$795,410.40)

Payment for quantities of Items 56, 83, 203, 268, 271 and 303 decreased in excess of 25% of the Engineer's Estimate may be adjusted in accordance with Section 4-1.03B(2), "Decreases of More Than 25 Percent", of the Standard Specifications. Determination of the adjustment is deferred until completion of work on this item.

The quantity shown herein when combined with the quantities specified in the Engineer's Estimate, and as modified by any previous change orders, shall be the final quantity for which payment will be made for the following items:

- Item No. 92: (F) STRUCTURE EXCAVATION TYPE RH
- Item No. 102: (F) STRUCTURE BACKFILL (BRIDGE)
- Item No. 172: (F) STRUCTURAL CONCRETE BRIDGE
- Item No. 216: (F) BAR REINFORCING STEEL (BRIDGE)
- Item No. 253: (F) MISCELLANEOUS METAL (BRIDGE)
- Item No. 271: (F) CONCRETE BARRIER (TYPE 60D)
- Item No. 273: (F) CONCRETE BARRIER (TYPE 732 MOD)

Estimated total cost for Decrease in Contract Item.....(\$922,688.40)

**Adjustment of Compensation at Unit Price:**

For all traffic closures of the Eastbound 80 mainline necessary to complete the work of this change order, the Contractor shall be compensated an agreed unit price of \$3,200.00 per closure. This unit price constitutes full compensation, including all markups, for this work.

All eastbound 80 lane closures necessary for the work of this change shall be performed under Lane Closure Chart No. 12A, as shown on Sheet No. 6 of approved Change Order No. 150.

Estimated Cost of Adjustment of Compensation at Agreed Unit Price = 100 Closures at \$3,200 / closure = \$320,000.00



**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

CCO: 149 Suppl. No. 0 Contract No. 04 - 0435V4 Road SF-80-4.9/5.9

FED. AID LOC.:

**Adjustment of Compensation at Lump Sum:**

For the reduced demolition work, concerning the bridge removal of the Interim Essex Street and First Street On-Ramps (Br. No. 34-0149 and 34-0150) being eliminated under this change order, the Contractor shall credit the Department an agreed lump sum of \$105,000.00. This sum constitutes full and complete compensation for all costs associated with Contract Bid Items No. 66 Bridge Removal, Location G and Contract Bid Item No. 67 Bridge Removal, Location H as a result of this change.

For all additional costs associated with the realignment of the Interim Eastbound Detour (ST6D Line) except the three excluded costs listed below, the Contractor shall be compensated an agreed lump sum of \$3,404,980.00. This sum constitutes full and final compensation, including all markups, for all costs resulting from this change.

Compensation provided under this lump sum includes but is not limited too, furnishing and erecting falsework concerning Frame 6U and 7U of Mainline, Bridge No. 34-0126R/L to accommodate traffic openings for the realigned Interim Eastbound Detour, constructing Frames 6U and 7U over traffic, and modifying the temporary supports due to the revised support loads and location.

Compensation provided under this change order includes all costs associated with the realignment of the Interim Eastbound Detour. No additional compensation shall be paid for this change except for the three excluded costs listed below:

- 1) Costs associated with the construction of the eastbound mainline roadway (SFOBBLO Line Sta. 36+46 to 44+41) have not been considered under this change order. Revised stage construction plans shall be issued under a supplemental change order and any additional costs associated with these revisions shall be addressed under that supplement.
- 2) Costs associated with conform paving over the existing eastbound roadway at the eastern conform of the Interim Eastbound Detour have not been considered under this change order. Should the cost concerning this work exceed the costs of the per plan conform, these additional costs shall be addressed under a supplemental change order.
- 3) Costs associated with the added temporary support for the Bent 19U End Diaphragm for Frame 7U have not been considered under this change order. Upon finalizing the design of this support, a supplemental change order shall be issued to provide compensation for the direct costs associated with this work.

Cost of Adjustment of Compensation at Agreed Lump Sum \$3,299,980.00

Should Contractor-Controlled Insurance Program costs apply, these costs will be determined separately and compensated by the Department.

Estimated Cost: Increase ☒ Decrease ☐ \$2,850,639.60

By reason of this order the time of completion will be adjusted as follows:

Deferred

Submitted by

Signature <i>Deanna Vilcheck</i>	Resident Engineer: Deanna Vilcheck	Date 4/21/07
----------------------------------	------------------------------------	--------------

Approval Recommended by

Signature	Construction Engineer: Dennis Turchon	Date
-----------	---------------------------------------	------

Engineer Approval by

Signature	(Print name and title) Mike Forner - Chief	Date
-----------	---	------

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

**NOTE:** If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature	(Print name and title)	Date
-----------	------------------------	------

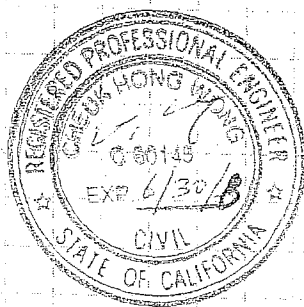
110  
100  
90  
80  
70  
60  
50

Station

SEE SHEET P-19

SEE SHEET P-19

R=10,008.5' Lt  
+97.47 BC  
+50.15 EC



2ND ST

BR NO. 34-0151

400' VC

+46.05  
Elev 82.88

+50.00 Elev 64.79  
+46.05 BVC  
Elev 70.66

EB +15.25 Elev 85.70  
END ST6D/BEGIN ST6DNEW  
+46.05 EVC  
Elev 86.28

PROFILE  
"ST6D/ST6DNEW" LINE (INTERIM)  
EASTBOUND I-80

SCALE: Horiz 1" = 50'  
Vert 1" = 10'

SUPERELEVATION DIAGRAM  
"ST6D/ST6DNEW" LINE (INTERIM)  
EASTBOUND I-80  
SCALE: Horiz 1" = 50'

+14.837 BC

R=600' Rt

Lt Traveled Way & Lt Shld  
Axis of Rotation

+17.181 EC  
+20.962 BC

R=712' Rt

+86.415 EC

+80.00

+80.00 Conform

+80.00 Conform  
103.70

HARRISON ST  
OFF-RAMP

PROFILE  
SCALE AS SHOWN

CCO -

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF	80	4.9/5.9		
REGISTERED CIVIL ENGINEER					
PLANS APPROVAL DATE					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					
REGISTERED PROFESSIONAL ENGINEER No. _____ Exp. _____ CIVIL STATE OF CALIFORNIA					

CONTRACT NO. 04-0435V4  
CCO NO. 149  
PAGE 4 OF 10  
SUBMITTED BY: Alonso Velez  
RESIDENT ENGINEER  
ACCEPTED BY: \_\_\_\_\_  
CONTRACTOR

CONTRACT NO. Q4-0435V4  
CCO NO. 149  
PAGE 5 OF 10  
SUBMITTED BY: Deann Uebachs  
RESIDENT ENGINEER  
ACCEPTED BY: \_\_\_\_\_  
CONTRACTOR

ST6DNEW LAYOUT (INTERIM)

SCALE 1" = 100'  
JUNE 27TH, 2006



EC=EB-ST6D 35+15.25 2.00LT  
= ST6DNEW 35+15.25 = ETW  
BEGIN TEMPORARY  
RAILING (TYPE K)

EXISTING MANHOLE. SEE DETAIL 1  
SEE DETAIL 6 FOR TEMP. RAIL @ COLUMN  
EXISTING MANHOLE. SEE DETAIL 2  
EXISTING ELECTRICAL CONDUIT  
SEE DETAIL 4  
EXISTING ELECTRICAL  
DUCKBANK. SEE  
DETAIL 5

42+80 END TEMPORARY  
RAILING (TYPE K)

BC ST6D 34+57.06

BC 36+14.837

39+00 END TEMPORARY  
RAILING (TYPE K)

39+00 31.14' RT  
CONFORM

39+77 12.37' RT  
CONFORM

39+80 23.0' RT  
CONFORM

41+40 CONFORM

EC 41+86.415

N 52° 36' 52" E

BC 43+63.470

R=1557'

N 40° 37' 30" E

47 EC46+98.272  
CONFORM



## CONSTRUCTION SEQUENCE -

## FRAMES

## 2 TEMPORARY SUPPORTS BENTS 4U-6U

1. Erect temporary supports and falsework for stages 5 and 6 of frames 4U, 5U and 6U.
2. Construct stages 5 and 6 of the frames 4U, 5U and 6U.
3. Stress frames longitudinally.
4. Wait 90 days for prestress shortening to take place.
5. If any settlement occurs during and after the longitudinal prestressing operation, the stage 5/6 bent cap shall be jacked up to match the elevation of the same previously completed bent cap.
6. Connect reinforcement in bent caps and place closure pour.
7. Stress bent caps.
8. Remove temporary supports.

## TEMPORARY SUPPORT DESIGN NOTES

1. All Temporary Supports shall be designed to allow the installation of jacks.
2. All temporary supports shall be designed by the Contractor.
3. Jacks, supports and foundation elements shall be capable of sustaining the factored design axial loads shown in the "Temporary Support Loads" table.
4. The loads shown do not include the weight of temporary supports, jacks or loads due to construction operations.
5. Jacks shall not be the load bearing element except during jacking operations.
6. The supports shall be designed to sustain a lateral load of 0.25 g where "g" is defined as the axial DL shown in the "Temporary Support Loads" table.
7. The supports shall be designed to resist the specified loads while deforming no more than 1/4 - inch vertically and 1/2 - inch horizontally.
8. The allowable concrete bearing pressure at jacking points is 1200 psi.
9. Support members shall evenly distribute jacking/support forces to the bent caps.

## GENERAL SUPPORT NOTES

1. The Contractor shall monitor vertical and horizontal displacement of the installed temporary support and the structure during all jacking, temporary support and construction operations.
2. Temporary supports shall be capable of resisting the specified loads while allowing thermal movements and/or prestress shortening to take place.
3. All jacking loads shall be applied simultaneously at each support location.

## TEMPORARY SUPPORT LOADS

Frame No.	Stage No.	Bent No.	Unfact. Axial DL (kips)	Unfact. Axial ADL (kips)	Unfact. Axial LL (kips)	Fact. Design Axial Load (kips)	Fact. Shear Lateral Load (kips)
4U	6	9U	650	N/A	N/A	975	
4U		11U	660	N/A	N/A	990	
5U		12U	780	N/A	N/A	1170	
5U		13U	510	N/A	N/A	765	
5U		15U	590	N/A	N/A	885	
5U		16U	740	N/A	N/A	1110	
6U		17U	750	N/A	N/A	1125	
6U		19U	1823 *	N/A	N/A	2735 *	
7U	5	19U END DIAPH-RAGM	841 *	N/A	N/A	1262 *	
7U		20U	2572 *	N/A	N/A	3858 *	
7U		22U	2025 *	N/A	N/A	3038 *	
7U		23U	2082 *	N/A	N/A	3123 *	
8U	3&4	24U	1000	N/A	295	1876	112
8U		25U	1097	N/A	267	1948	60
8U		26U	1275	N/A	259	2164	72
8U		27U	1182	N/A	254	2033	86
8U		28U	1496	N/A	341	2611	157

## 2 NOTE:

The initial jacking loads shall be assumed to be not less than the unfactored axial dead load shown in the "Temporary Support Loads" table.

\* These values are for the interior temporary support. 1

2

1

2 NOTE: For Bents 10U and 14 U See Bent 11U

CONSTRUCTION SEQUENCE -  
TEMPORARY SUPPORTS BENTS 19U-23U

1. Erect temporary supports and falsework for stage 5 of Bents 19U, 20U, 22U and 23U
2. Construct stage five of Frames 6U and 7U
3. Stress the frames longitudinally
4. Wait 90 days for prestress shortening to take place.
5. If any minor settlement occurs during or after the longitudinal prestressing operation, jack each stage 5 bent cap to match the elevation of the same previously completed bent cap.
6. Connect reinforcement in bent caps and place closure pour.
7. Stress bent caps
8. Remove temporary supports.

## TEMPORARY SUPPORT DESIGN NOTES

1. All temporary supports shall be designed to allow the placement of jacks.
2. All temporary supports shall be designed by the Contractor.
3. Jacks, supports and foundation elements shall be capable of sustaining the factored design axial loads shown in the "Temporary Support Loads" table.
4. The loads shown do not include the weight of temporary supports, jacks or loads due to construction operations.
5. Jacks shall not be the load bearing element except during jacking operations.
6. The supports shall be designed to sustain a lateral load of 0.25 g where "g" is defined as the axial DL shown in the "Temporary Support Loads" table.
7. The supports shall be designed to resist the specified loads while deforming no more than 1/4 - inch vertically and 1/2 - inch horizontally.
8. The allowable concrete bearing pressure at jacking or support points is 1200 psi.
9. Support members shall evenly distribute jacking/support forces to the bent caps.
10. The temporary supports shall be located as shown on the respective bent cap elevation sheets.

## GENERAL SUPPORT NOTES

1. The Contractor shall monitor vertical and horizontal displacement of the installed temporary Support and the structure during all jacking, temporary support and construction operations.
2. Temporary supports shall be capable of resisting the specified loads while allowing thermal movements and/or prestress shortening to take place.
3. All jacking loads shall be applied simultaneously at each support location.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF	80	4.9/5.9	1112	511

*G. Setberg*  
REGISTERED CIVIL ENGINEER  
No. 47829  
Exp. 12-31-02  
6-17-02  
PLANS APPROVAL DATE

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CONTRACT NO. 04-0435V4

CCO NO. 14950

PAGE 6 OF 10

SUBMITTED BY: \_\_\_\_\_  
RESIDENT ENGINEERACCEPTED BY: \_\_\_\_\_  
CONTRACTOR

PROFESSIONAL ENGINEER G. Slocum No. 44950 Exp. 03-31-08 CIVIL STATE OF CALIFORNIA	1-24-07	Notes modified	EW	GS
	MARK DATE	DESCRIPTIONS	BY	CH'D
	REVISIONS			

CONTRACT CHANGE ORDER NO. \_\_\_\_\_  
SHEET \_\_\_\_ OF \_\_\_\_

PROFESSIONAL ENGINEER K. VO No. 63139 Exp. 06-30-06 CIVIL STATE OF CALIFORNIA	8-26-03	Note added	EW	KV
	MARK DATE	DESCRIPTIONS	BY	CH'D
	REVISIONS			

CONTRACT CHANGE ORDER NO. \_\_\_\_\_  
SHEET \_\_\_\_ OF \_\_\_\_

1 ADDED PER ADDENDUM NO. 1 DATED OCTOBER 4, 2002


2 REVISED PER ADDENDUM NO. 2 DATED OCTOBER 25, 2002.

SFOBB - SEISMIC RETROFIT PROJECT NO. 12

SFOBB - SAN FRANCISCO APPROACH (REPLACE)

DESIGN	BY G. Setberg	CHECKED G. Slocum
DETAILS	BY E. Montevirgen	CHECKED G. Slocum
QUANTITIES	BY D. Abellon	CHECKED K. Bhala

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATIONBRIDGE NO.  
34-0126RL  
POST MILE  
5.07/5.67  
DIVISION OF STRUCTURES  
STRUCTURE DESIGN 2UPPER DECK  
TEMPORARY SUPPORT DETAILS NO. 1



1. For Bent Cap Reinf, see "Bent Cap 19U Details No. 1" and "Bent Cap 19U Details No. 2" sheets.
2.  = bundled bars
3. Splices in Main Column or Main Pile reinforcement shall be butt spliced. Splices shall be ultimate type and must be staggered a minimum of 5'-0". Only one splice permitted per bar in each allowable splice zone.

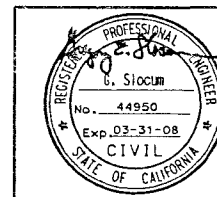
2.  = bundled bars

3. *Splices in Main Column or Main Pile reinforcement shall be butt spliced. Splices shall be ultimate type and must be staggered a minimum of 5'-0". Only one splice permitted per bar in each allowable splice zone.*

4. For Drain Pipe Details, see "Deck Drain Layout No. 5" sheet.
5. For Pile Details not shown, see the following sheets:  
"Foundation Plans"  
"Pile Data"
6. For Pipe Pin Details, see "Pipe Pin Details" sheet.
7. For Tie Bar Detail, see "Bent 4L Elevation" sheet.

66'-2 $\frac{3}{8}$ " Stage 2 Construction

8. All hoops splices shall be ultimate butt splices.
9. For Temporary Support loads and details, see "Temporary Support Details" sheets.
10. Column 2 is Column Bent 2 of Interim GTR off Ramp. 
11. Column 2 reinforcement details and dimensions to be used by Column Bent 2 of Interim GTR off Ramp. 



△				
△				
△				
4	1-24-07	Dimension added	EW	G
3	1-24-07	Note added	EW	G
MARK	DATE	DESCRIPTIONS	BY	CH
		REVISIONS		

CONTRACT CHANGE ORDER NO. \_\_\_\_\_  
SHEET            OF

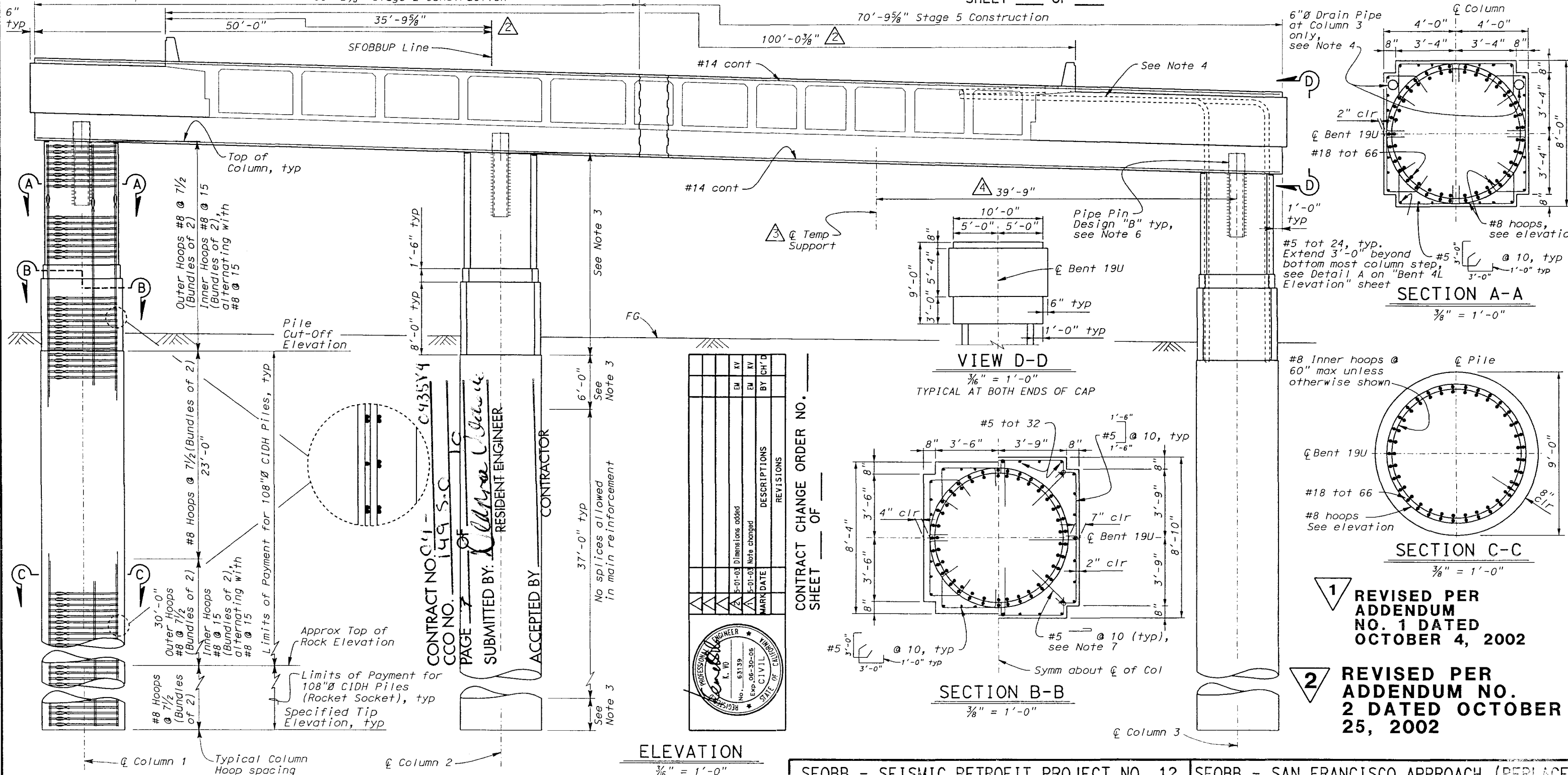
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	TOTAL SHEET
04	SF	80	4.9/5.9	1

*J. S. Sether*  
 REGISTERED CIVIL ENGINEER  
 12-03-01

6-17-02  
 PLANS APPROVAL DATE

*G. S. Sether*  
 No. 47-25  
 Exp. 12-31-02  
 CIVIL  
 STATE OF CALIFORNIA

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DESIGN BY M. Friedhelm CHECKED M. Akkari DETAILS BY K. Jolley/E. Montevirgen CHECKED M. Akkari QUANTITIES BY Y. Hu CHECKED G. Jaleel	STATE OF <b>CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF STRUCTURES STRUCTURE DESIGN <b>2</b>	BRIDGE NO.	UPPER DECK BENT 19U ELEVATION
			34-0126RL	
			POST MILE	
			5.07/5.67	

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 1/1/99)

ORIGINAL SCALE IN INCHES  
FOR REDUCED PLANS

CU 04  
FA 0435Y1

DISREGARD PRINTS BEARING  
EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY)

DE

```
FILE => gdbt19ue.dan
```

## NOTES:

1. For Bent Cap Reinforcement, see "Bent Cap 22U Details No. 1" and "Bent Cap 22U Details No. 2" sheets.

2. = bundled bars

3. Splices in Main Column and Main Pile reinforcement shall be butt spliced. Splices shall be ultimate type and must be staggered a minimum of 5'-0". Only one splice permitted per bar in each allowable splice zone.

4. For Drain Pipe Details see "Deck Drain Layout No. 6" sheet.

5. For Pile Details not shown see the following sheets:  
"Foundations Plans"  
"Pile Data"

6. For Tie Bar Detail, see "Bent 4L Elevation" sheet.

7. For Pipe Pin Details, see "Pipe Pin Details" sheet.

8. For Isolation Casing Details, see "Isolation Casing Details" sheet.

9. All hoops splices shall be ultimate butt splices.

10. For Temporary Support loads and details, see "Temporary Support Details" sheets.

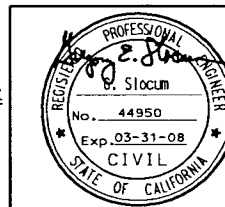
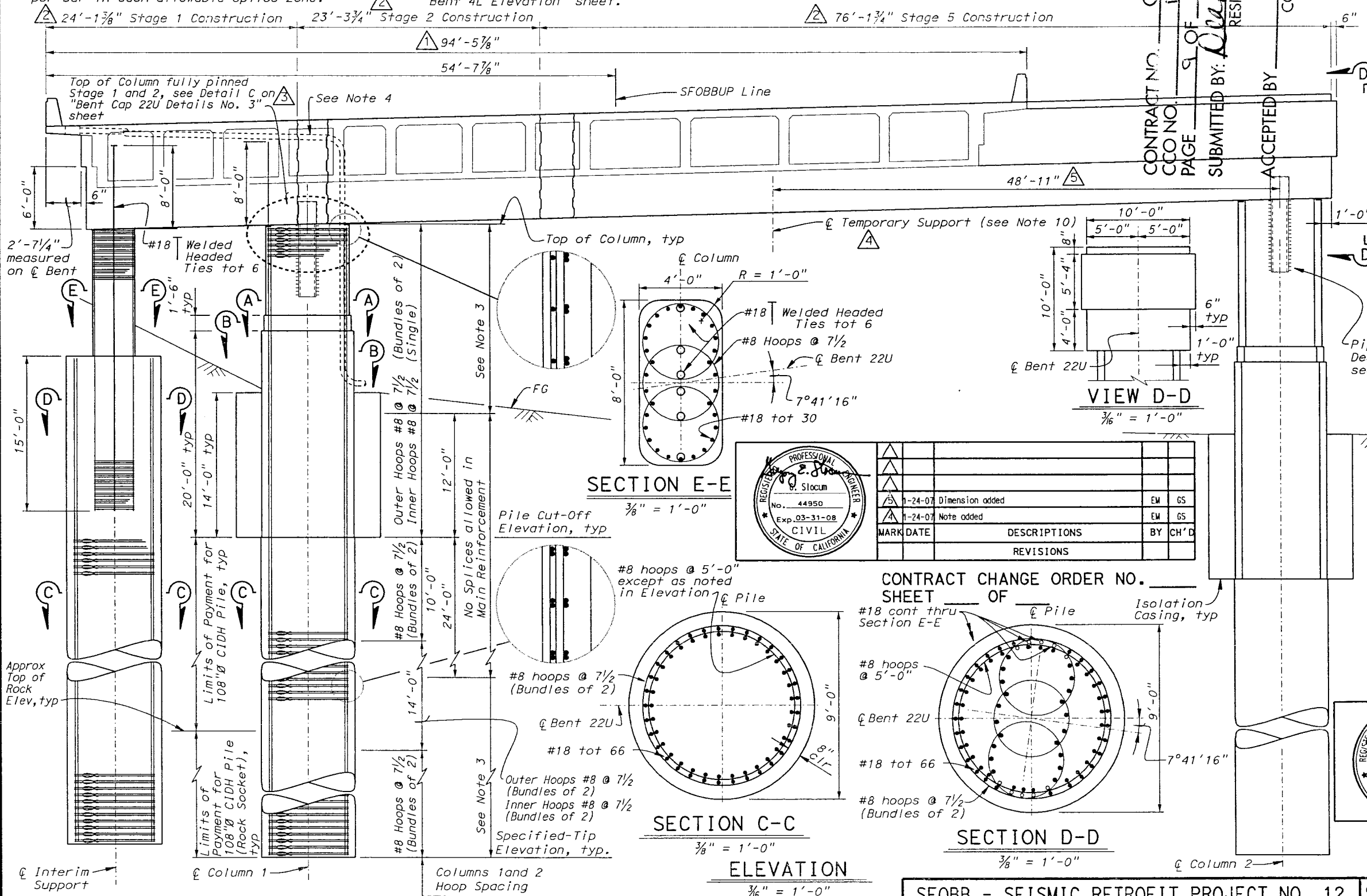
## REVISED PER ADDENDUM NO. 1 DATED OCTOBER 4, 2002

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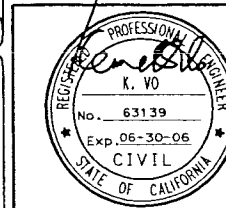
DIST	COUNTY	ROUTE	POST MILES	TOTAL PROJECT
04	SF	80	4.9/5.9	

REGISTERED CIVIL ENGINEER  
12-03-01  
6-17-02  
PLANS APPROVAL DATE

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MARK	DATE	DESCRIPTIONS	BY	CH'D
1-24-07		Dimension added	EW	GS
1-24-07		Note added	EW	GS
REVISIONS				



MARK	DATE	DESCRIPTIONS	BY	CH'D
8-26-03		Details added	EW	JZ
8-26-03		Dimension changed	EW	JZ
5-01-03		Dimension added	EW	KV
REVISIONS				

CONTRACT CHANGE ORDER NO. SHEET OF

SFOBB - SEISMIC RETROFIT PROJECT NO. 12

SFOBB - SAN FRANCISCO APPROACH (REPLACE)

DESIGN	BY S. Pahlavan	CHECKED M. Friedhelm
DETAILS	BY E. Montevirgen	CHECKED M. Friedhelm
QUANTITIES	BY Y. Hu	CHECKED G. Jaleel

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES  
STRUCTURE DESIGN 2

BRIDGE NO.	34-0126RL
POST MILE	5.07/5.67

UPPER DECK  
BENT 22U ELEVATION

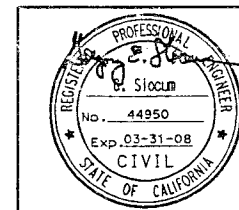


## NOTES:

- For Bent Cap Reinforcement, see "Bent Cap 23U Details No. 1" and "Bent Cap 23U Details No. 2" sheets.
- = bundled bars
- Splices in Main Column & Main Pile reinforcement shall be butt spliced. Splices shall be ultimate type and must be staggered a minimum of 5'-0". Only one splice permitted per bar in each allowable splice zone.

## REVISED PER ADDENDUM NO. 1 DATED OCTOBER 4, 2002

- For Pile Details not shown see the following sheets:  
"Foundations Plans"  
"Pile Data"
- For Tie Bar Detail, see "Bent 4L Elevation" sheet.
- For Pipe Pin Details, see "Pipe Pin Details" sheet.
- All hoops splices shall be ultimate butt splices.
- For Temporary Support loads and details, see "Temporary Support Details" sheets.



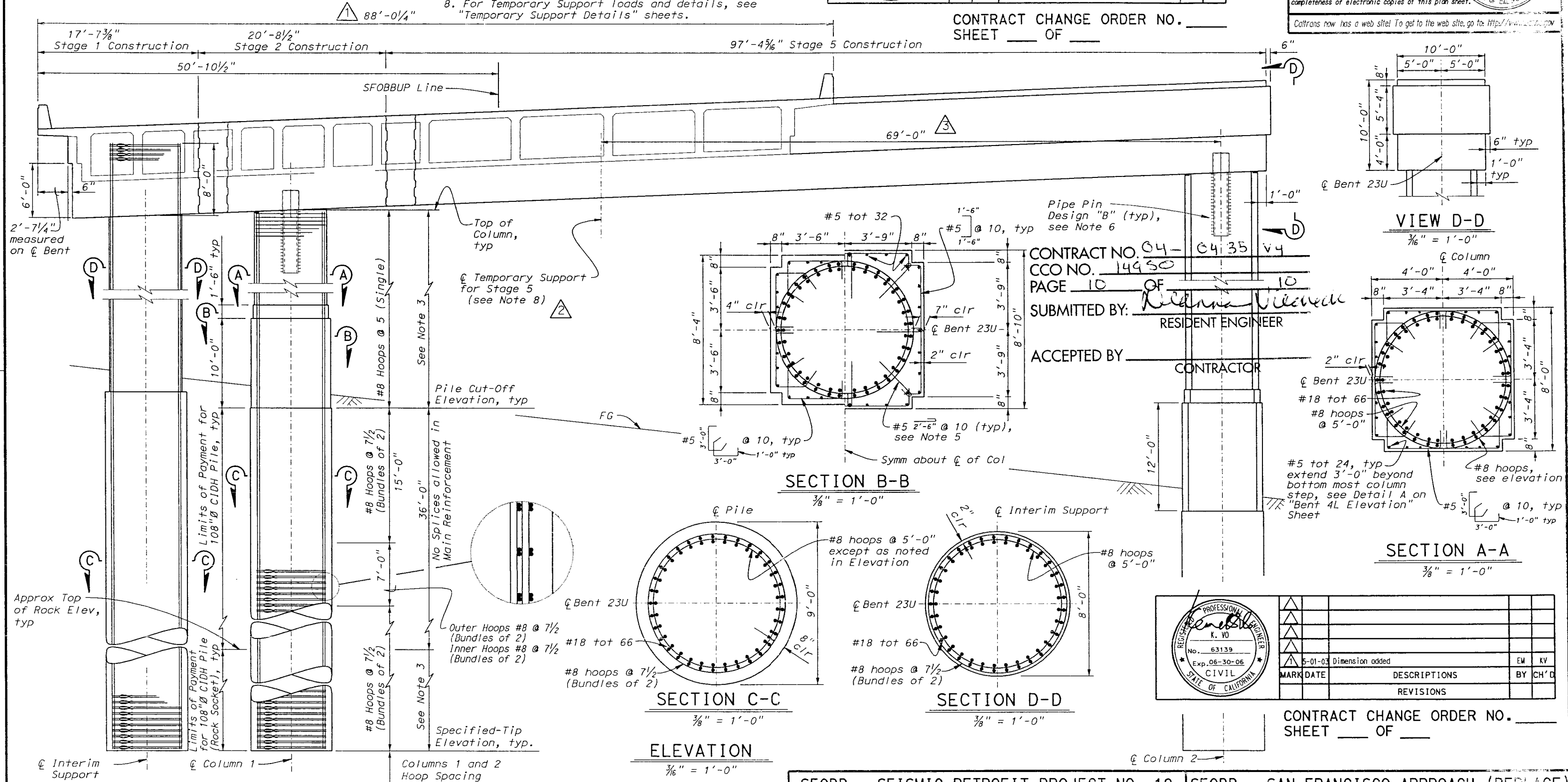
MARK	DATE	DESCRIPTIONS	BY	CH'D
1	1-24-07	Dimension added	EW	GS
2	1-24-07	Note added	EW	GS
		REVISIONS		

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	ALTS
04	SF	80	4.9/5.9	982	11

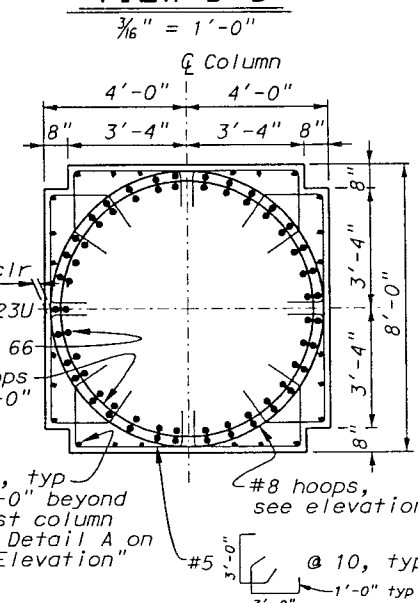
*G. Sottero*  
REGISTERED CIVIL ENGINEER  
12-03-01  
6-17-02  
PLANS APPROVAL DATE

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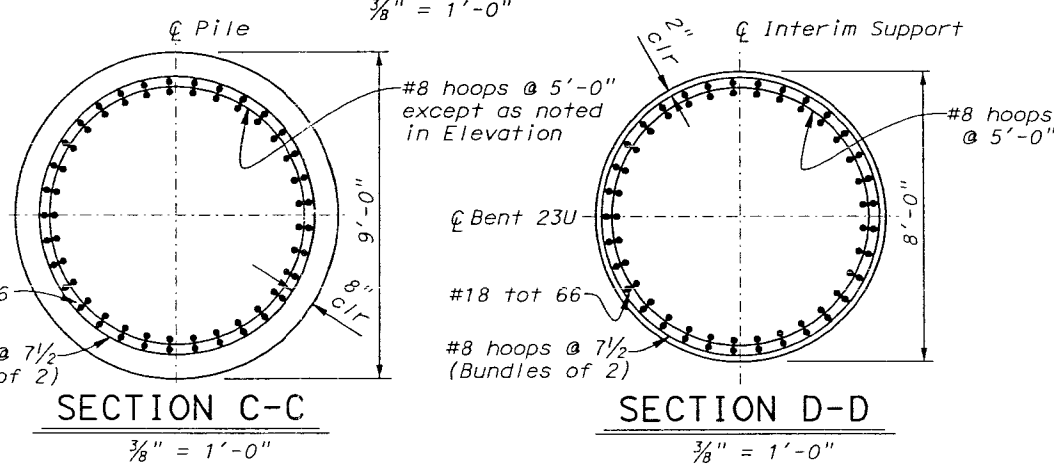
VIEW D-D



SECTION A-A

 $\frac{3}{8}'' = 1'-0''$ 

SECTION B-B

 $\frac{3}{8}'' = 1'-0''$ 

SECTION C-C

 $\frac{3}{8}'' = 1'-0''$ 

ELEVATION

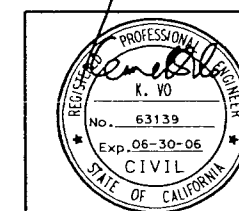
 $\frac{3}{8}'' = 1'-0''$ 

SECTION D-D

 $\frac{3}{8}'' = 1'-0''$ 

CONTRACT NO. 04-0435 V4  
CCO NO. 14950  
PAGE 10 OF 10  
SUBMITTED BY: *Kenneth W. W. W.*  
RESIDENT ENGINEER

ACCEPTED BY: \_\_\_\_\_  
CONTRACTOR



MARK	DATE	DESCRIPTIONS	BY	CH'D
1	5-01-03	Dimension added	EW	KV
		REVISIONS		

CONTRACT CHANGE ORDER NO. \_\_\_\_\_  
SHEET \_\_\_\_\_ OF \_\_\_\_\_

SFOBB - SEISMIC RETROFIT PROJECT NO. 12

SFOBB - SAN FRANCISCO APPROACH (REPLACE)

STATE OF  
**CALIFORNIA**  
DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES  
**STRUCTURE DESIGN 2**

BRIDGE NO.  
34-0126RL  
POST MILE  
5.07/5.67

UPPER DECK  
**BENT 23U ELEVATION**

DESIGN	BY S. Pahlavan	CHECKED M. Friedhelm
DETAILS	BY E. Montevargen	CHECKED M. Friedhelm
QUANTITIES	BY Y. Hu	CHECKED G. Jaleel

NOTES:

- For Bent Cap Reinforcement, see "Bent Cap 20U Details No. 1" and "Bent Cap 20U Details No. 2" sheets.
- == bundled bars
- Splices in Main Column and Main Pile reinforcement shall be butt spliced. Splices shall be ultimate type and must be staggered a minimum of 5'-0". Only one splice permitted per bar in each allowable splice zone.

1

REVISED PER ADDENDUM NO. 1 DATED OCTOBER 4, 2002

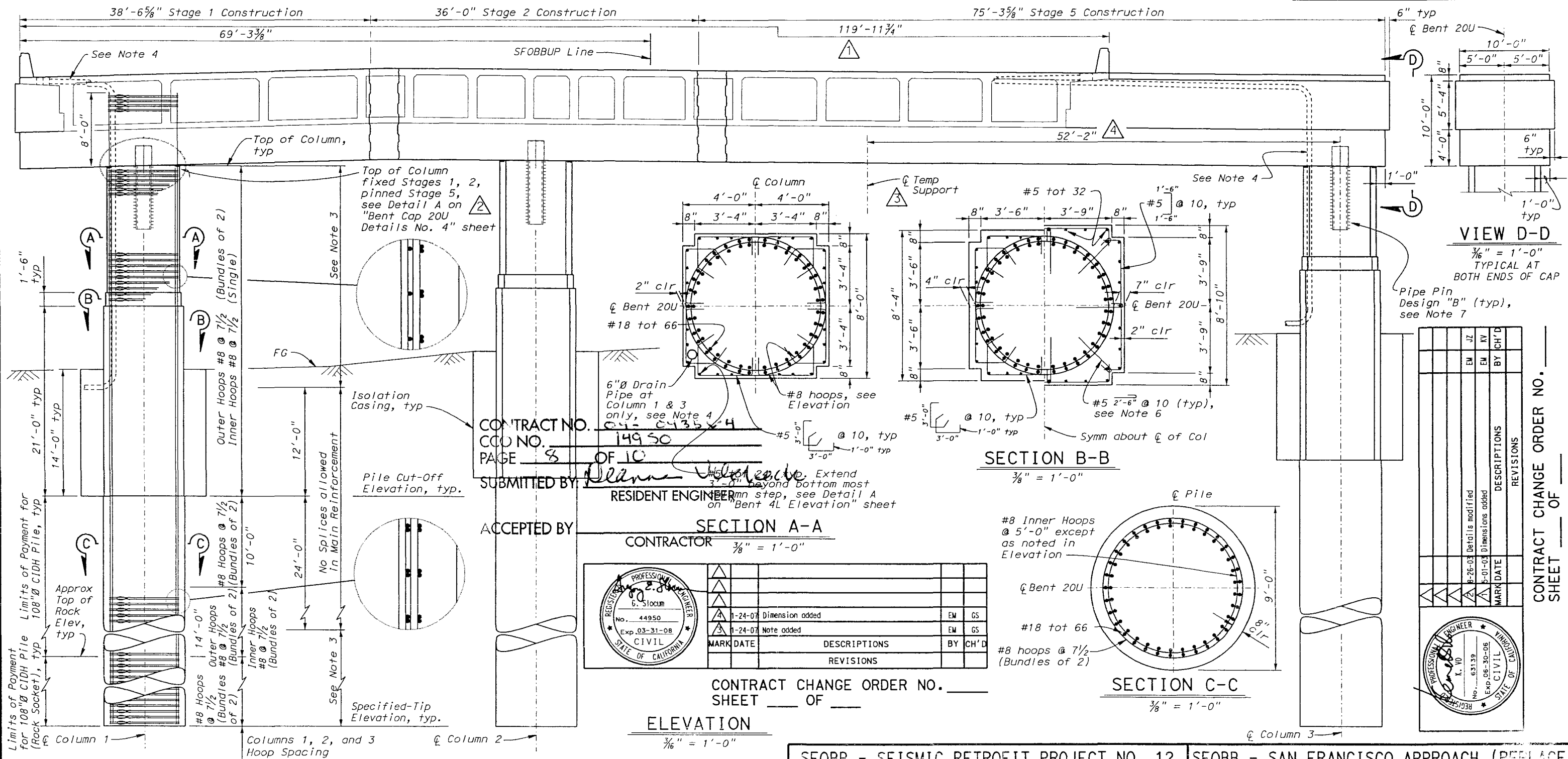
1

- For Drain Pipe Details see "Deck Drain Layout No. 5" sheet.
- For Pile Details not shown see the following sheets:  
"Foundation Plans"  
"Pile Data"

- For Tie Bar Detail, see "Bent 4L Elevation" sheet.
- For Pipe Pin Details, see "Pipe Pin Details" sheet.
- For Isolation Casing Details, see "Isolation Casing Details" sheet.
- All hoops splices shall be ultimate butt splices.
- For Temporary Support loads and details, see "Temporary Support Details" sheets.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT
04	SF	80	4.9/5.9

*J. Settler*  
REGISTERED CIVIL ENGINEER  
12-03-01  
6-17-02  
PLANS APPROVAL DATE  
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CONTRACT NO. CCO NO. 14950  
PAGE 8 OF 10  
SUBMITTED BY Elaine J. Pahlavan  
RESIDENT ENGINEER

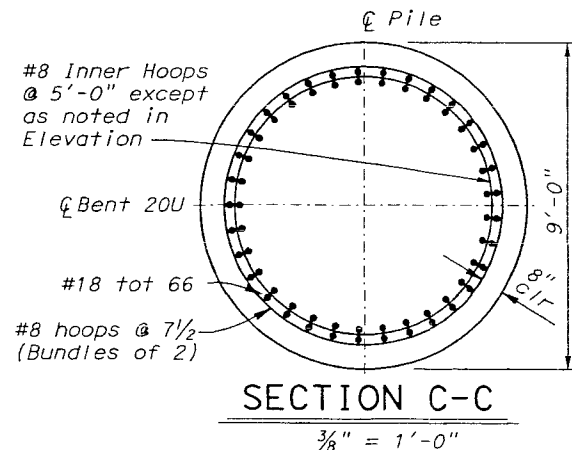
ACCEPTED BY SECTION A-A  
CONTRACTOR 3/8\" = 1'-0\"

MARK	DATE	DESCRIPTIONS	BY	CH'D
1	1-24-07	Dimension added	EM	GS
2	1-24-07	Note added	EM	GS

CONTRACT CHANGE ORDER NO. \_\_\_\_\_  
SHEET \_\_\_\_\_ OF \_\_\_\_\_

ELEVATION  
3/16\" = 1'-0\"

SECTION B-B  
3/8\" = 1'-0\"



VIEW D-D  
3/8\" = 1'-0\"  
TYPICAL AT BOTH ENDS OF CAP

REVISIONS	DESCRIPTIONS	DATE	BY	CH'D
1	8-26-03 Details modified		EM	JZ
2	5-01-03 Dimensions added		EM	KV

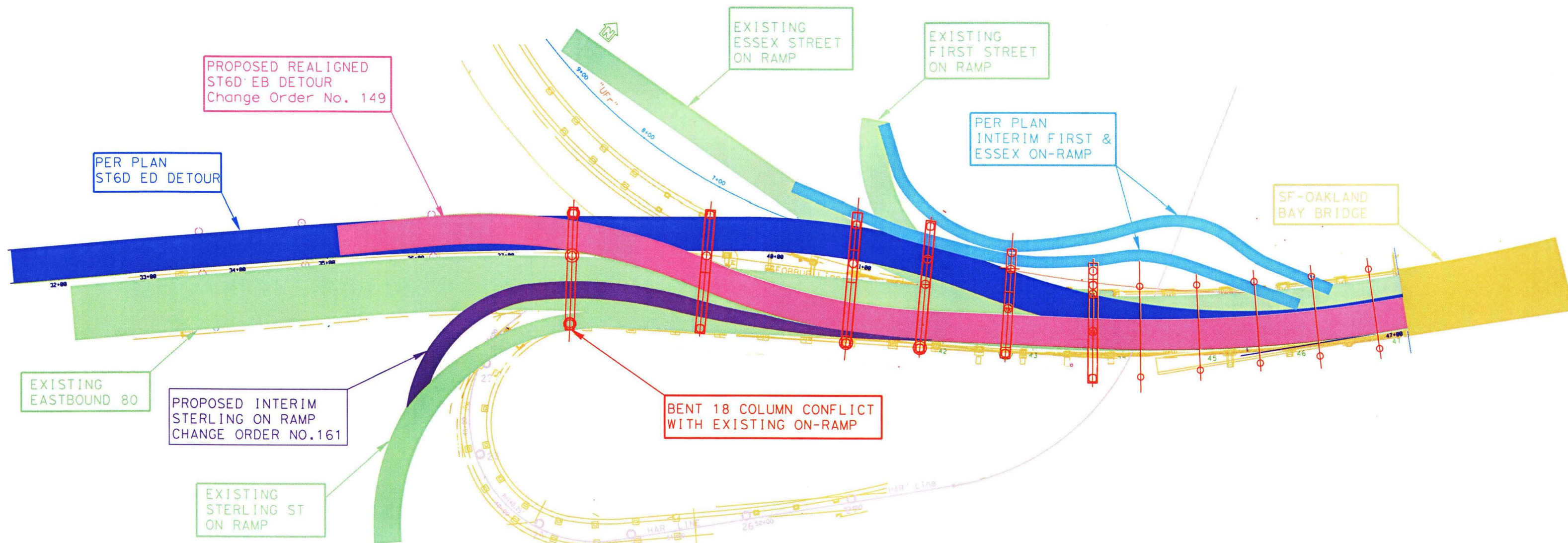
CONTRACT CHANGE ORDER NO. \_\_\_\_\_  
SHEET \_\_\_\_\_ OF \_\_\_\_\_

DESIGN BY S. Pahlavan CHECKED M. Friedhelm			STATE OF CALIFORNIA		BRIDGE NO. 34-0126RL		UPPER DECK	
DETAILS BY E. Montevirgen CHECKED M. Friedhelm			DIVISION OF STRUCTURES		POST MILE 5.07/5.67		BENT 20U ELEVATION	
QUANTITIES BY Y. Hu CHECKED G. Jaleel			DEPARTMENT OF TRANSPORTATION		CU 04 EA 0435V1			

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 1/1/99) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3



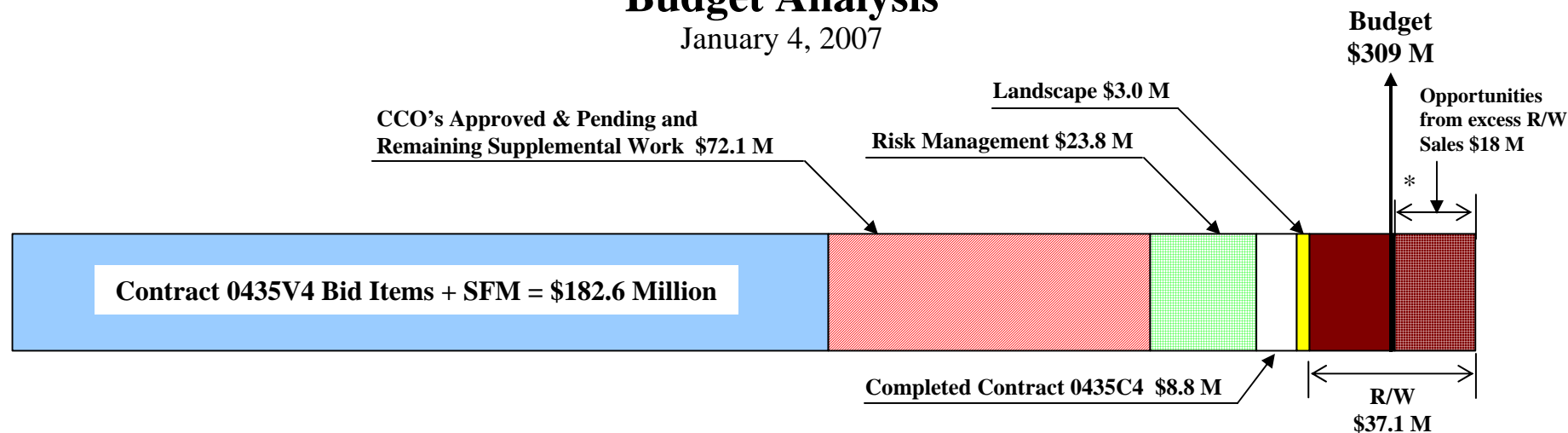
## REALIGNMENT OF ST6D STAGE 5 DETOUR





# SFOBB West Approach Budget Analysis

January 4, 2007



\* Total Capital Outlay considering \$18 million opportunities from excess R/W sales is \$309.5 million

## Contract 04-0435V4 & 0435C4 SFOBB West Approach Current Contract Budget Funding Status

January 4, 2007 Basis

Contract 0435V4 Contract Items	\$	177,878,840
State Furnished Materials (SFM)	\$	6,001,200
Subtotal	\$	183,880,040
Supplemental Work	\$	20,828,430
Contingency @ 4.9%	\$	9,931,530
Subtotal Original Contract Allotment	\$	214,640,000
Supplemental Budget Allocation Approved	\$	41,674,000
Pending Supplemental Fund Request Approval	\$	-
Total Current Contract Allotment 0435V4	\$	256,314,000
Completed Contract 0435C4	\$	8,759,000
West Approach Right of Way (R/W)	\$	37,141,000
West Approach Landscape	\$	3,000,000
Remaining Unallotted Budget	\$	3,786,000
Total Current West Approach Contract Budget	\$	309,000,000

Reported Total Forecast At Completion \$309,000,000  
In 3rd Quarter 2006 TBSRP Report

## Contract 04-0435V4 & 0435C4 SFOBB West Approach Contract Forecast At Completion (FAC) & Variance

January 4, 2007 Basis

Contract 0435V4 Contract Items	\$	177,878,840
State Furnished Materials (SFM)	\$	4,751,200
Subtotal	\$	182,630,040
Supplemental Work Remaining	\$	2,634,180
CCO's		
CCO's (Approved (128) + Pending (47) = Total (175))	\$	64,980,941
CCO's = or > \$1Million Pending (2)	\$	4,500,000
CCO# Pending POC's approval (0)	\$	-
Total Ongoing Contract 0435V4	\$	254,745,161
Risk Management	\$	23,813,000
Completed Contract 0435C4	\$	8,759,000
West Approach Landscape	\$	3,000,000
West Approach Right of Way (R/W)	\$	37,141,000
Opportunities from Excess R/W Sales	\$	(18,000,000)

\* Total \$ 309,458,161  
Variance ( Total - Current Budget ) \$ 458,161

*Confidential Draft – For Deliberative Purpose Only*

## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** February 12, 2007

**FR:** Tony Anziano, Toll Bridge Program Manager, Caltrans

**RE:** Agenda No. - 5c, 1  
Item- San Francisco-Oakland Bay Bridge Updates  
East Span SAS Superstructure: CCO 21 – Tower Splice Changes

---

### **RECOMMENDATION:**

At this time, request is for approval to negotiate CCO 21(Tower Splice Changes) elements in an amount not to exceed \$2.3 million.

### **COST:**

Amount not to exceed \$2.3 million

### **SCHEDULE IMPACTS:**

N/A

## **DISCUSSION**

### **Background**

On January 31, 2006, a request was presented to the TBPOC to approve Draft Addendum #8 related to tower constructability and other improvements for the SFOBB SAS Contract. The request was made in response to bidder inquiries. The TBPOC denied the request based on the potential of extending the bid period and delaying the award of the SAS contract. The TBPOC recommended that staff respond to bidder inquiries as necessary and to work with the contractor as a CRIP or via contract change order.

Draft Addendum #8 included the following elements (See Attachment):

- Tower constructability enhancements and conflict resolution
  - Full-scale wood models: 1) Tower bolted splice and 2) Elevation 89
  - Changes to indicate assembly and shop welding options for tower bolted connections.
  - Mitigate mill to bear at grillage segments
  - Temporary tower design
- E2 known conflict resolution
  - Integrated shop drawings of E2 cap beams
- Remaining known conflict resolution
  - Improvement of welding specifications.

## *Memorandum*

The overall intent of Draft Addendum #8 was to facilitate bidder competition and to mitigate cost and schedule risk during construction. Only some elements of Addendum #8 are included in the proposed CCO. These elements are highlighted in Draft Addendum #8 attachment and include CCO groups 1, 2, 3, and 8.

This CCO is within the amount identified for CCOs on the attached Budget Balance Beam and within allocation and budget.

**Attachment(s):**

- 1) Contract Change Order (CCO) 21 Memorandum
- 2) SAS Budget Balance Beam, December 20, 2006
- 3) Draft Addendum #8, January 27, 2006



**CONTRACT CHANGE ORDER MEMORANDUM**

DC-CEM-4903 (OLD HC-39 REV. 6/93) CT# 7541-3544-0

DATE

Feb. 02, 2007

TO <b>Peter Siegenthaler, Principle Bridge Engineer</b>			FILE EA NUMBER 04-SF-80-13.2/13.9
FROM <b>Gary Pursell, Sup. T.E., Resident Engineer</b>			FEDERAL NUMBER
CCO NO. <b>21</b>	SUPPLEMENT NO.	CATEGORY CODE CHPT	CONTINGENCY BALANCE (including this change)
\$ 2,300,000 (max) INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>			HEADQUARTERS APPROVAL REQUIRED? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
SUPPLEMENTAL FUNDS PROVIDED \$			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

**THIS CHANGE ORDER PROVIDES FOR:**

Changes to structural steel plan sheet details and contract Special Provisions.

This change order provides for constructability improvements and to clarify contract requirements. These changes were prepared and proposed for incorporation into the Bid Documents as Addendum No. 8. The Toll Bridge Project Oversight Committee (TBPOC) directed that Addendum No. 8 not be issued and that these (and other) changes be incorporated into the Contract by Change Order after Bid Award.

This Change Order incorporates modifications detailed in Change Requests prepared by the Consultant Designer, T.Y. Lin International – Moffat & Nichol (J.V.) and transmitted to the Resident Engineer as design Change Request Number 10, 18.1, 18.2, 169 and 179.

**1. CHANGES TO ORTHOTROPIC BOX GIRDER DECK (OBGD) CROSS BEAMS.**

Increase size of Cross Beam Stiffeners: Increase 179,900 Kilograms Structural Steel (Bridge) (Box Girder).

**2. CHANGES TO TOWER FIELD SPLICES.**

Details for field splicing of the tower legs of the Self-Anchored Suspension Bridge, raised constructability concerns as presented in the Bid Documents. The Designer proposed changes to simplify construction that have been successfully demonstrated in several full-scale wood models commissioned prior to Bid Opening. After completion of the models, additional changes were identified to provide improved access for fabrication and inspection, resolve conflicts, and provide additional clarity to the Contract Plans. These changes are detailed in design Change Requests Numbers 10 and 18.1.

**3. CHANGES AT TOWER STRUTS.**

Seal Welds were added to the tower leg doubler plate to prevent moisture intrusion and reduce maintenance. The openings on the outer plate were enlarged to accommodate these Seal Welds.

**4. REINSTATE TOWER INTERMEDIATE STIFFENER PLATES AT SKIN PLATE "D".**

Addendum Number 4 of the contract modified the stiffener plates in the tower for constructability issues due to limited access to certain welds. Inadvertently, some of the stiffener plates were omitted in the revised plan sheets. This change order reinstates the missing stiffener plates, thereby maintaining Addendum Number 4's intent to make the welding more accessible.

Negotiations related to the final cost of this change are still continuing at this time. Current negotiations show at this time the maximum cost not to exceed \$2,300,000. The Department requests approval for this amount, with the understanding that the final negotiated cost of this change order will be reported to HQ and TBPOC. Final negotiated costs related to this change will be placed in the project files.

This change order received concurrence from Michael Whiteside (Toll Bridge Design Spec Manager) and Marwan Nader, the design engineer of record.

This change order received a Headquarters Notice to Proceed (HQ NTP) on July 21, 2006. Preliminary drawings were provided to the Contractor for pricing after receiving the HQ NTP.

The Department respectfully requests concurrence from TBPOC on this change.

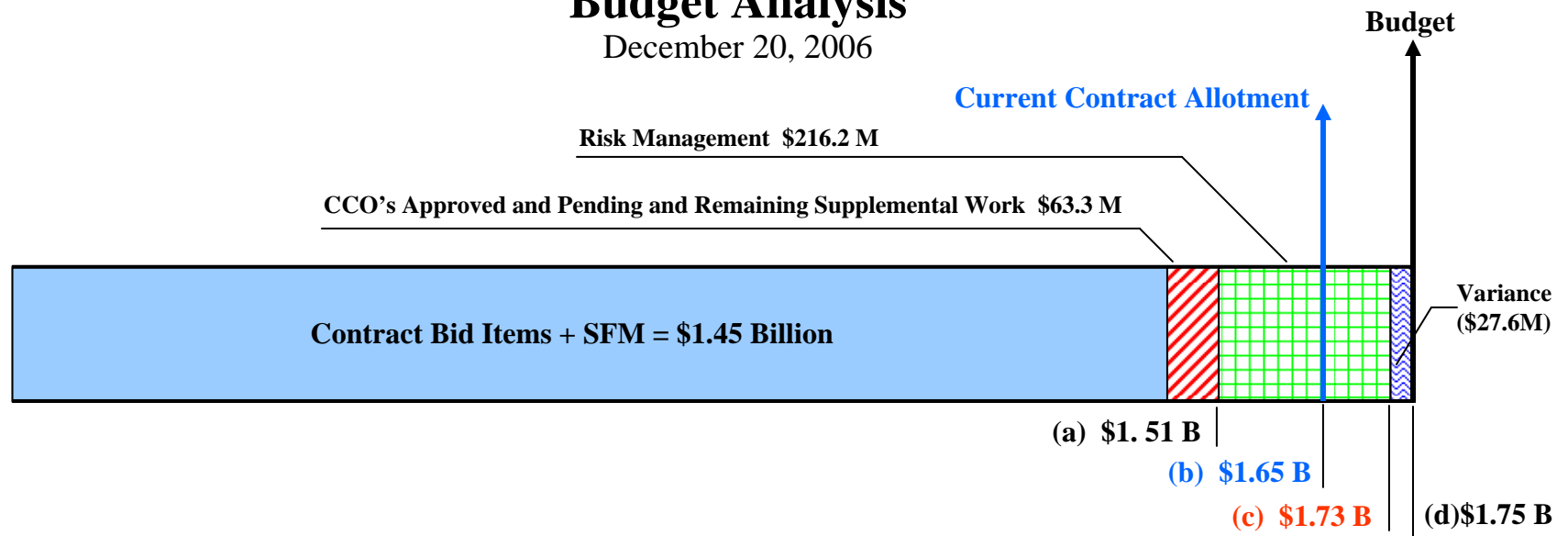
<b>CONCURRED BY:</b>		<b>ESTIMATE OF COST</b>	
STRUCTURE REPRESENTATIVE	DATE	THIS REQUEST	TOTAL TO DATE
SR. BRIDGE ENGINEER	DATE	ITEMS	
FHWA REPRESENTATIVE	DATE	FORCE ACCOUNT	
PROJECT ENGINEER	DATE	AGREED PRICE	
		ADJUSTMENT	
		2,300,000 max	2,300,000 max
		<b>TOTAL</b>	
OTHER (SPECIFY)		<b>FEDERAL PARTICIPATION</b>	
Michael Whiteside, Toll Bridge Design - Specifications Manager	DATE	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING	
	DATE	FEDERAL FUNDING SOURCE (IF MORE THAN ONE FUNDING SOURCE OR P.I.P. TYPE)	
	DATE	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS	
DISTRICT PRIOR APPROVAL BY	DATE	FEDERAL FUNDING SOURCE	PERCENT
HQ (ISSUE & APPROVE) (TO PROCEED) BY	DATE		
HQ NTP, Ken Darby	7/21/2006		
RESIDENT ENGINEER SIGNATURE	DATE		

This portion to be updated by CADb

# SAS Superstructure Contract 04-0120F4

## Budget Analysis

December 20, 2006



**Contract 04-0120F4 SAS Superstructure**  
**Current Contract Budget Funding Status**  
 December 20, 2006 Basis

Contract Bid Items	\$	1,434,085,935
State Furnished Materials (SFM)	\$	12,473,475
Subtotal	\$	1,446,559,410
Supplemental Work	\$	52,418,000
Contingency at 10%	\$	148,652,590
Subtotal Original Contract Allotment	\$	1,647,630,000
Supplemental Budget Allocation Approved	\$	-
Subtotal Current Contract Allotment	\$	1,647,630,000 ( b )
Remaining Unallotted Budget (Current Contract Budget - Current Contract Allotment)	\$	106,070,000
<b>Total Current Contract Budget</b>	<b>\$</b>	<b>1,753,700,000 ( d )</b>

Reported Total Forecast At Completion  
 In 3rd Quarter 2006 TBSRP Report

\$1,767,400,000

**Contract 04-0120F4 SAS Superstructure**  
**Contract Forecast At Completion (FAC) & Variance**  
 December 20, 2006 Basis

Contract Bid Items	\$	1,434,085,935
State Furnished Materials (SFM)	\$	12,473,475
Subtotal	\$	1,446,559,410
Supplemental Work Remaining	\$	47,238,200
CCO's		
CCO's (Approved (13) + Pending (11) = Total (24))	\$	13,053,050
CCO's = or > \$1Million Pending POC's approval CCO# 14, 21 (2)	\$	3,022,391
Subtotal	\$	1,509,873,051 ( a )
Risk Management Costs - 4th Quarter 2006 Results	\$	216,200,000
<b>Total</b>	<b>\$</b>	<b>1,726,073,051 ( c )</b>

Variance ( Total - Current Budget ) \$ (27,626,949)

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**DRAFT****ADDENDUM 8  
04-0120F4**

CCO Group	Change Request #	SUBJECT	DESCRIPTION	B.I. #	TYPE OF CHANGE		
					PLANS	SPECS	OTHER
Group A - Tower Constructability Enhancements & Conflict Resolution							
1	10	Full-scale wood models: 1) tower bolted splice @ elev 114 and 2) elevation 89 (full scale test of diaphragm, crosslinks). The building of these mockups may result in changes to the specs and/or plans.	Sheets 532, 587, 588		✓		
2	18	Changes to indicate assembly and shop welding options for tower bolted connections. This includes items from CR 10 (tower bolted splice). This change allows for more field bolted-welded connections.	1) Sheets 420, 538, 541, 541A, 542, 543-561F, 570, and 583 (32 plan sheets in total); 2) Section 10-1.59 "STEEL STRUCTURES", subsection "FABRICATION", subsection "Bolted Connections", 4th paragraph preceding the tables, and 3) subsection "SHOP WELDING", subsection "Design Details", item G.4.f and G.4.l.	204	✓	✓	
3	179	Mitigate mill to bear at grillage segments	Sheets 608, 609, 611 and 612 (4 plan sheets in total)	264	✓		
4	186	Increase the types of temporary tower allowed	Section 10-1.41 "TEMPORARY TOWERS", Subsection "TEMPORARY TOWER DESIGN"	269, 270, 271		✓	
Group B - E2 Known Conflict Resolution							
5	22	Perform Integrated Shop Drawings (ISD) E2 cap beams: post-tensioning. Related to CR 176. This reconciles the layout of anchor bolts vis-à-vis the shear key redesign	Sheet 511-517, 519, 981 (9 plan sheets in total)		✓		
Group C - Remaining Know Conflict Resolution							
6	154	Substitute WT sections for built-up sections	Section 8-1.01 "SUBSTITUTION OF NON-METRIC MATERIALS AND PRODUCTS", add a paragraph	211		✓	
7	170	Breaking strength of "virgin" rope	Section 10-1.60, "CABLE SYSTEM," subsection "MATERIALS AND FABRICATION," subsection "Suspender Ropes": add a paragraph	184		✓	
8	169 (clean-up)	Improvements to welding specs from the Welding Task Force, BAMC, & JV internal reviews. Cleanup from Addendum 6.	1) Sheets 578-581, 584, 586, 598, 656, 659, and 661; 2) Section 10-1.59 "STEEL STRUCTURES", subsection "ASSEMBLY," subsection "Tower", 4th paragraph		✓	✓	
9	178	Clarify space necessary to perform UT on diaphragm plate to closed rib CJP weld	Section 10-1.59 "STEEL STRUCTURES," subsection "INSPECTION AND TESTING," 1) Item 1.2 Box Internal Stiffening and 2) add Note 14	263		✓	

= CCO 21



## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** February 12, 2007

**FR:** Tony Anziano, Toll Bridge Program Manager, Caltrans

**RE:** Agenda No. - 5d, 1  
Item- San Francisco-Oakland Bay Bridge Updates  
Oakland Touchdown: Addendum 1

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### **RECOMMENDATION:**

The PMT recommends approval of Addendum 1 to Oakland Touchdown Contract No. 1.

### **COST:**

\$0.6 million

### **SCHEDULE:**

The scheduled advertise date was February 5, 2007. The issuance of Addendum 1 must be concurrent with the advertising of the original PS&E package due to the addition of the A+B bidding specification in the addendum. This is to ensure that contractors will not be confused about the bidding method. The revised advertise date is February 26, 2007. The revision to the advertising date will not impact the bid opening or award dates so no overall impact to schedule will occur.

### **DISCUSSION:**

#### **Background**

The TBPOC approved PS&E for the OTD No. 1 Contract in September 2006. The PS&E contained standard low bid award provisions. Subsequent consideration has been given to revising the contract, by addendum, to an A+B bid award. The rationale supporting A+B is as follows.

The OTD No. 1 contract planned on using a disincentive of \$86,000 per day for not meeting the internal milestone of completing the westbound bridge by January 1, 2010. This milestone would have been required in OTD No. 1, because the SAS contractor is entitled to this access as stated in Addendum No. 5 of the SAS contract. Both a disincentive and A+B bidding were discussed by the PMT as potential solutions. A+B bidding was viewed as a more attractive administrative tool to achieve the goal of completing the westbound bridge by January 1, 2010.

The proposed addendum also includes a bidder's compensation (stipend) provision and additional contractor outreach both of which are designed at maximizing contractor interest in the project. Finally, one technical revision is included in the addendum, relating to work on an electrical

## *Memorandum*

substation, and one clarification is included conforming the Owner-Controlled Insurance Program/Policy (OCIP) specification with the Time Related Overhead specification.

The final language for the addendum is still in development and will be presented to the TBPOC on February 15, 2007. It will receive final review by the PMT prior to that date. A summary of the contents of the addendum is as follows:

Subject	Description	Type of Change	
		Plans	Specs
A + B Bidding	Modifies Special Notices, Section 2, 3, 4, 5-1.26, 10-1.____ of the Special Provisions and the Proposal and Contract document		✓
Bidders Compensation	Adds Section 2-1.09 Bidders Compensation; Includes a bidders stipend of \$200,000 for each of the 3 lowest responsive bidders		✓
Mole Substation	Modifies Section 10-3. Signals, Lighting and Electrical Systems; Since the electrical substation is part of the whole system, a coordination study as well as a sequence of operation requirement should be added to the specifications.		✓
Contractors Outreach	Modifies Special Notices; There will be an outreach to contractors held on 3/29/07 at the Mandella Taining Center in Oakland.		✓
TRO Specification	Conform TRO specification to OCIP specification		✓

**Attachment(s):**

- 1) Oakland Touchdown Addendum 1 (to be provided at the 2/15 TBPOC meeting)



## **Item 6: New Benicia-Martinez Bridge**

## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** February 12, 2007

**FR:** Tony Anziano, Toll Bridge Program Manager, Caltrans

**RE:** Agenda No. - 6a, 1

Item- New Benicia-Martinez Bridge Update  
North Interchange: CCO 135 - 680/780 Interchange/North  
Approach

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### **RECOMMENDATION:**

Approval of CCO 135 to implement the proposed settlement of \$2,008,500 to resolve claimed loss of productivity and extended overhead costs for the prime contractor.

### **COST:**

\$2.0 million

### **SCHEDULE:**

No Impact

### **DISCUSSION**

#### **Background**

This CCO will implement a proposed settlement of claims filed by CC Myers for the 680/780 Interchange Project, part of the New Benicia Martinez Bridge Project. The claims relate to 414 working days of delay incurred by the contractor between January 2002 and February 2006.

During this period, the contractor was delayed due to claimed problems associated with the following issues. It should be noted that these issues do not each contribute to a specific portion of the delay. Many of them occurred concurrently but together all relate to the total claimed delay.

1. **Grade Conflicts.** Conflicts were identified between field survey marks and plans. These conflicts required some concrete re-work and some revisions to plans.
2. **Lightweight Concrete.** Similar to problems encountered on the main span of the bridge, heat of hydration problems required a revised design that placed cooling tubes in the concrete to provide for proper setting. The contract has already been compensated for direct costs incurred for this work but due to overlap with other delay issues, the associated delay claim has remained open.
3. **Resequencing of Work.** The contractor had to resequence a significant portion of planned work due to problems with soil conditions during pile driving, revisions to falsework required by the Union Pacific Railroad which has trackage passing through the construction area, and delays to the main span of the bridge.

## *Memorandum*

As a result of the overall delay during this period, the contractor has claimed entitlement for costs associated with loss of productivity and overhead costs incurred during the period of delay. The contractor has submitted a detailed analysis of their claim for a total delay claim of \$4,896,200. The Department of Transportation has conducted an independent analysis that has concluded a settlement of \$2.0 million is well within the range of reasonable exposure.

This CCO is within the amounts identified for CCOs on the attached Budget Balance Beam and within budget and allocation for the contract.

**Attachment(s):**

- 1) Contract Change Order (CCO) 135
- 2) CCO 135 Memorandum
- 3) North Interchange Budget Balance Beam, January, 26, 2007



**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

CCO: 135	Suppl. No. 0	Contract No. 04 - 006064	Road SOL-680-L 0.3/L 1.0 SOL-780-0.7/1.5	FED. AID LOC.: ACIM-680-1(054)56Mike Forner, Dist. Div. Chief
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**To: C C MYERS INC**

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

**Adjustment of Compensation at Lump Sum:**

Compensates the Prime Contractor C.C. Myers Inc. for all impact and inefficiency costs pertaining to labor, material and equipment. It also resolves all Time Related Overhead Adjustment (TRO) costs and time issues on the project due to department caused delays. Finally it includes interest from October 06 - March 07. This change order excludes costs relating to subcontractors.

Cost of Adjustment of Compensation at Lump Sum .....\$2,008,500.00

For this work, the contractor will be paid the sum of \$ 2,008,500.00, this sum constitutes full compensation, including markups, for this change.

All notices of differing site conditions, protests of unilaterally issued change orders and notices of potential claims filed by the subcontractor pertaining to project #04-006064 shall be considered resolved and no additional compensation shall be made hereto.

By acceptance of this change order, the contractor agrees to the compensation provided herein. This change order shall constitute a final binding agreement in connection with the resolution of all outstanding Contract costs incurred on the project except for costs regarding subcontractor costs. The contractor further agrees to release and forever discharge the Department of Transportation from all claims, actions, suits, causes of action, arbitration, debts, obligations or liabilities, whether known or unknown, which have ever existed or which do exist, arising from or relating in any way to these Contractor costs except for items or extra work bill exceptions at the time of the proposed final estimate.

In connection with this waiver and relinquishment, the subcontractor acknowledges that it may later discover facts in addition to or different from those that it now knows or believes to exist. The subcontractor also recognizes that damages may be suffered in the future that are not currently known to the Contractor. It is the intent of the Contractor to fully release all disputes and differences that are known or unknown, suspected or unsuspected, that now exist, may exist in the future or heretofore have existed with respect to projects #04-006064.

The Contractor freely and voluntarily enters into this change order after careful review of the content hereof.

There will be no time adjustment by reason of this contract change order since the work involved did not affect the controlling operation.

**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

CCO: 135	Suppl. No. 0	Contract No. 04 - 006064	Road SOL-680-L 0.3/L 1.0 SOL-780-0.7/1.5	FED. AID LOC.: ACIM-680-1(054)56Mike Forner, Dist. Div. Chief
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Estimated Cost: Increase ☒ Decrease ☐ \$2,008,500.00

By reason of this order the time of completion will be adjusted as follows: 0 days

**Submitted by**

Signature	Resident Engineer: Leah Budu	Date
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**Approval Recommended by**

Signature	Construction Engineer: DAVID AMBUEHL, Const. Mngr.	Date
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**Engineer Approval by**

Signature	(Print name and title) Mike Forner, Dist. Div. Chief - Chief	Date
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We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

**NOTE:** If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

**Contractor Acceptance by**

Signature	(Print name and title)	Date
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**CONTRACT CHANGE ORDER MEMORANDUM**

DATE: 2/1/2007

Page 1 of 1

TO: Mike Forner, Dist. Div. Chief / DAVID AMBUEHL, Const. Mngr.			FILE: <b>E.A.</b> 04 - 006064	
FROM: Leah Budu			<b>CO-RTE-PM</b> SOL-680-L 0.3/L 1.0 SOL-780-0.7/1.5	
			<b>FED. NO.</b> ACIM-680-1(054)56Mike Forner, Dist. Div. Chief	
CCO#: <b>135</b>	SUPPLEMENT#: <b>0</b>	Category Code:	CONTINGENCY BALANCE (incl. this change) <b>\$3,025,422.76</b>	
COST: <b>\$2,008,500.00</b> INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>			HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SUPPLEMENTAL FUNDS PROVIDED: <b>\$0.00</b>			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
<b>CCO DESCRIPTION:</b> Labor Inefficiency and TRO Settlement			<b>PROJECT DESCRIPTION:</b> CONSTRUCT I/C AND NORTH APPROACH	
Original Contract Time: <b>680</b> Day(s)	Time Adj. This Change: <b>0</b> Day(s)	Previously Approved CCO Time Adjustments: <b>0</b> Day(s)	Percentage Time Adjusted: (including this change) <b>0</b> %	Total # of Unreconciled Deferred Time CCO(s): (including this change) <b>0</b>

**THIS CHANGE ORDER PROVIDES FOR:**

Refer to Claim Settlement Report No.1 - 680/780 Interchange Project for a detailed explanation of all issues resolved by CCO 135-0 and detailed cost break down.(see attached CSR)

FHWA concurrence is not required. This is a zero federal-aid-funding project and FHWA has no oversight responsibility.

Project Manager has concurred with this change on 1/29/07.

Maintenance concurrence is not required, as this work does not affect the completed facilities.

The Resident Engineer recommends this change order be approved.

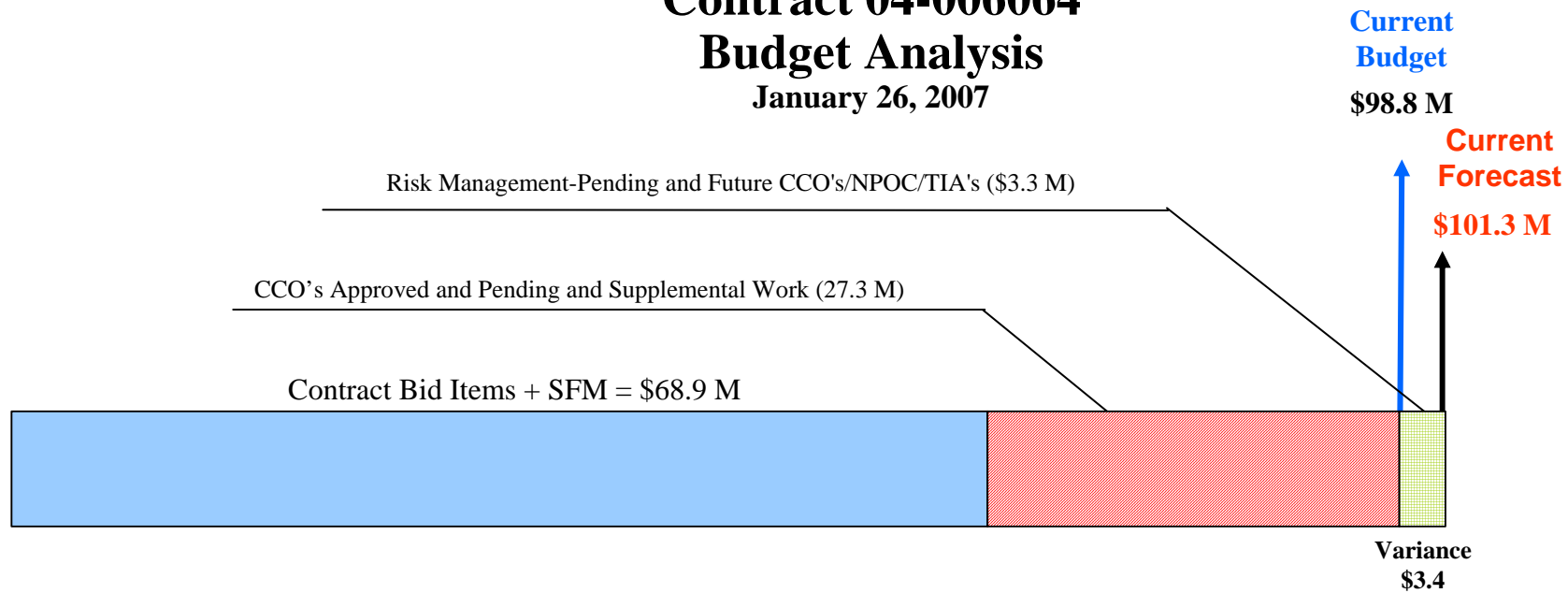
<b>CONCURRED BY:</b>			<b>ESTIMATE OF COST</b>		
Construction Engineer:	Peter Strykers	Date	THIS REQUEST		TOTAL TO DATE
Bridge Engineer:	Peter Strykers	Date 1/29/07	ITEMS	\$0.00	\$0.00
Project Engineer:	Willie DeGuia	Date 1/29/07	FORCE ACCOUNT	\$0.00	\$0.00
Project Manager:	Mo Pazooki	Date 1/29/07	AGREED PRICE	\$0.00	\$0.00
FHWA Rep.:		Date	ADJUSTMENT	\$2,008,500.00	\$2,008,500.00
Environmental:		Date	<b>TOTAL</b>	<b>\$2,008,500.00</b>	<b>\$2,008,500.00</b>
Other (specify):	David Ambuehl, Construction Mana	Date	<b>FEDERAL PARTICIPATION</b>		
Other (specify):	Mike Forner, Dist. Div. Chief	Date	PARTICIPATING	PARTICIPATING IN PART	NONE
District Prior Approval By:		Date	NON-PARTICIPATING (MAINTENANCE) <input checked="" type="checkbox"/> NON-PARTICIPATING		
HQ (Issue Approve) By:		Date	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)		
Resident Engineer's Signature:		Date	<input checked="" type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS		
			FEDERAL FUNDING SOURCE	PERCENT	



# Contract 04-006064

## Budget Analysis

January 26, 2007



**Contract 04-006064 North Interchange**  
**Current Contract Budget Funding Status**  
 January 27, 2007 Basis

Contract Bid Items	\$	64,416,704	
State Furnished Materials (SFM)	\$	1,499,675	
Subtotal	\$	65,916,379	
Supplemental Work	\$	1,855,000	
Contingency	\$	6,428,621	
Subtotal Original Contract Allotment	\$	74,200,000	
Supplemental Budget Allocation #1	\$	18,046,600	
Supplemental Budget Allocation #2	\$	5,814,425	(a)
Subtotal Current Contract Allotment	\$	98,061,025	
Remaining Unallotted Budget	\$	782,975	
Total Current Contract Budget	\$	98,844,000	

**Contract 04-006064 North Interchange**  
**Contract Forecast At Completion (FAC) & Variance**  
 January 27, 2007 Basis

Contract Bid Items	\$	64,416,704	
Quantity Overrun	\$	3,007,529	
State Furnished Materials (SFM)	\$	1,499,675	
Subtotal	\$	68,923,908	
Supplemental Work	\$	1,855,000	
CCO's			
CCO's (Approved + Pending = Total)	\$	27,282,117	(b)
Remaining Contingency and Budget			
Subtotal	\$	98,061,025	
Risk Management			
Risk Management for Electrical Delays and Close-Out	\$	2,500,000	
Remaining Contingency	\$	782,975	
Total Current Contract forecast At Completion (as of 2/1/07)	\$	101,344,000	

a) Supplemental Budget Allocation #2 from allocation transfer of \$5.8 M from New Bridge contract.

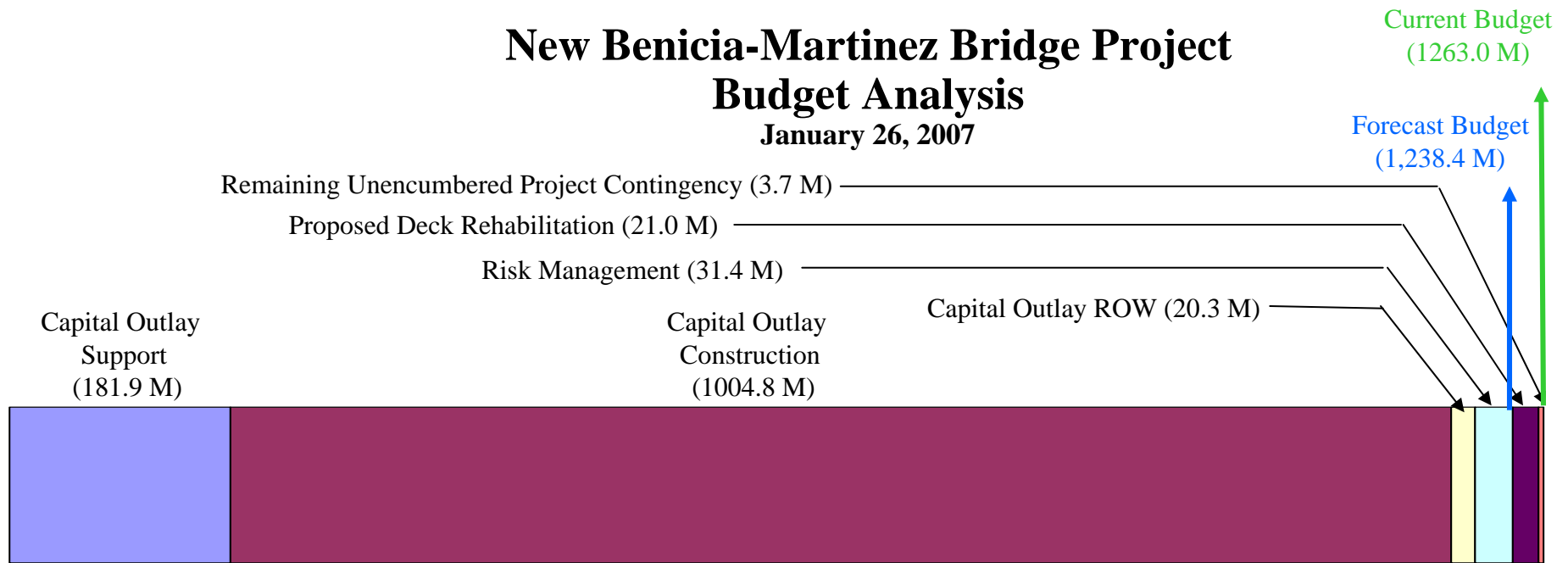
b) Includes approval of CCO #135.

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# New Benicia-Martinez Bridge Project

## Budget Analysis

January 26, 2007



**New Benicia-Martinez Bridge Project**  
**Current Project Budget**  
 January 27, 2007 Basis

Capital Outlay Support	\$	181.8
Capital Outlay Construction	\$	1,004.7
Capital Outlay Right-of Way	\$	20.3
Subtotal	\$	1,206.8
Budgeted Project Contingency	\$	56.2
Total Current Project Budget	\$	1,263.0

**New Benicia-Martinez Bridge Project**  
**Current Forecast Budget**  
 January 27, 2007 Basis

Capital Outlay Support	\$	181.9
Capital Outlay Construction	\$	1,004.8
Capital Outlay Right-of Way	\$	20.3
Subtotal	\$	1,207.0
Risk Management		
Capital Outlay Support		5.0
Capital Outlay Construction		26.4
Total Risk Management		31.4
Total Forecast Budget	\$	1,238.4
Forecast Project Contingency	\$	24.6
Proposed Additional Scope		
Deck Rehabilitation of Existing Bridge	\$	21.0
Remaining Unencumbered Project Contingency	\$	3.6

**Variance**  
**(24.6 M)**

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## **Item 7: Other Business**